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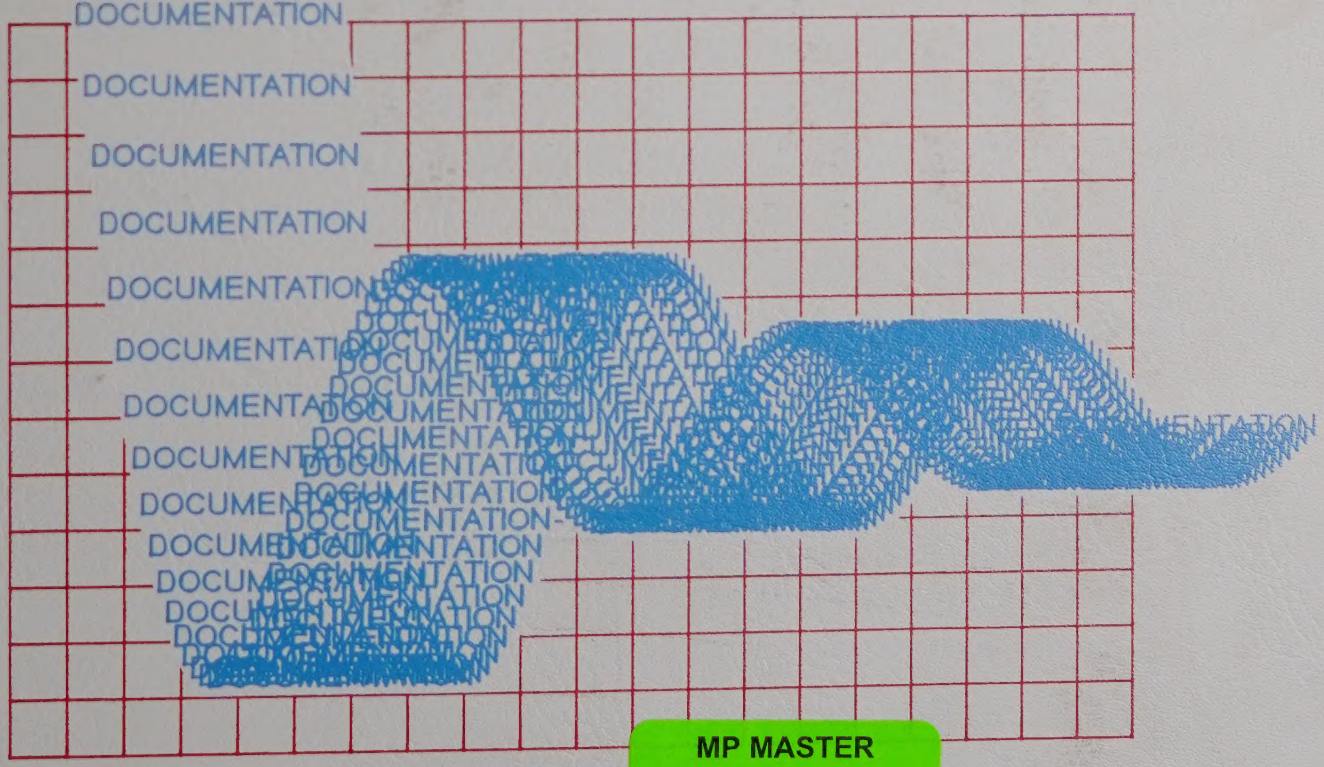

MP MASTER

MA20523

ROHDE&SCHWARZ

Test and Measurement
Division

Service Manual

I/Q Modulation Generator

AMIQ

1110.2003.02

Printed in the Federal
Republic of Germany

Certified Quality System

ISO 9001

DQS REG. NO 1954-04

Qualitätszertifikat

Sehr geehrter Kunde,

Sie haben sich für den Kauf eines Rohde & Schwarz-Produktes entschieden. Hiermit erhalten Sie ein nach modernsten Fertigungsmethoden hergestelltes Produkt. Es wurde nach den Regeln unseres Qualitätsmanagementsystems entwickelt, gefertigt und geprüft. Das Rohde & Schwarz-Qualitätsmanagementsystem ist nach ISO 9001 zertifiziert.

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Le système de gestion qualité de Rohde & Schwarz a été homologué conformément à la norme ISO 9001.

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Spare Parts Express Service

Phone: +49 89 4129 - 2465

Fax: +49 89 41 29 - 3306

E-mail: werner.breidling@rsd.de

In case of urgent spare parts requirements for this Rohde & Schwarz unit, please contact our spare parts express service.

Outside business hours, please leave us a message or send a fax or e-mail. We shall contact you promptly.

Safety Instructions

This unit has been designed and tested in accordance with the EC Certificate of Conformity and has left the manufacturer's plant in a condition fully complying with safety standards.

To maintain this condition and to ensure safe operation, the user must observe all instructions and warnings given in this operating manual.

1. The unit may be used only in the operating conditions and positions specified by the manufacturer. Unless otherwise agreed, the following applies to R&S products:

   Pollution severity 2, overvoltage category 2, IP degree of protection 2X, altitude max. 2000 m.

   The unit may be operated only from supply networks fused with max. 16 A.

2. For measurements in circuits with voltages V_{rms} > 30 V, suitable measures should be taken to avoid any hazards.

   (using, for example, appropriate measuring equipment, fusing, current limiting, electrical separation, insulation).

3. If the unit is to be permanently wired, the PE terminal of the unit must first be connected to the PE conductor on site before any other connections are made (installation and cabling of the unit to be performed only by qualified technical personnel).

4. For permanently installed units without built-in fuses, circuit breakers or similar protective devices, the supply circuit must be fused such as to provide suitable protection for the users and equipment.

5. Prior to switching on the unit, it must be ensured that the nominal voltage set on the unit matches the nominal voltage of the AC supply network.

   If a different voltage is to be set, the power fuse of the unit may have to be changed accordingly.

6. Units of protection class I with disconnectible AC supply cable and appliance connector may be operated only from a power socket with earthing contact and with the PE conductor connected.

7. It is not permissible to interrupt the PE conductor intentionally, neither in the incoming cable nor on the unit itself as this may cause the unit to become electrically hazardous.

   Any extension lines or multiple socket outlets used must be checked for compliance with relevant safety standards at regular intervals.

8. If the unit has no power switch for disconnection from the AC supply, the plug of the connecting cable is regarded as the disconnecting device. In such cases it must be ensured that the power plug is easily reachable and accessible at all times (length of connecting cable approx. 2 m). Functional or electronic switches are not suitable for providing disconnection from the AC supply.

   If units without power switches are integrated in racks or systems, a disconnecting device must be provided at system level.

9. Applicable local or national safety regulations and rules for the prevention of accidents must be observed in all work performed.

   Prior to performing any work on the unit or opening the unit, the latter must be disconnected from the supply network.

   Any adjustments, replacements of parts, maintenance or repair may be carried out only by authorized R&S technical personnel.

   Only original parts may be used for replacing parts relevant to safety (eg power switches, power transformers, fuses). A safety test must be performed after each replacement of parts relevant to safety.

   (visual inspection, PE conductor test, insulation-resistance, leakage-current measurement, functional test).

10. Any additional safety instructions given in this manual are also to be observed.

Safety-related symbols used on equipment and documentation from R&S:

Observe operating instructions

Weight indication for units >18 kg

PE terminal

Ground terminal

Danger! Shock hazard

Warning! High temperatures Warning! Hot surfaces

Ground

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Contents of Manuals for I/Q Modulation Generator AMIQ

Service Manual

This service manual for I/Q Modulation Generator AMIQ provides information on checking the generator for compliance with rated specifications, as well as on adjustment, repair and troubleshooting. It further contains all the information necessary for repairing the generator by the replacement of modules.

The service manual comprises four chapters and an annex (chapter 5) containing the AMIQ circuit documentation:

Chapter 1 provides all the information necessary to check AMIQ for compliance with rated specifications. The required test equipment is included, too.

Chapter 2 describes the adjustment of the 2.5 MHz and 15 MHz filters, adjustment of the I/Q signals and fault diagnosis.

Chapter 3 describes the design of AMIQ as well as simple measures for repair and fault diagnosis, in particular, the replacement of modules and access to hardware settings by means of service commands.

Chapter 4 contains information on the extension and modification of AMIQ by installing instrument software and retrofitting options.

Chapter 5 contains spare parts lists and exploded views of AMIQ.

Chapter 6 contains the circuit documentation for module „IQ Analog/Digital Unit" (IQ board).

Chapter 7 contains the circuit documentation for option „Differential Outputs" (AMIQ-B2).

Operating Manual

The operating manual contains all information on the characteristics, putting into operation, operation and remote control of AMIQ. It further provides hints on preventive maintenance and fault diagnosis by means of warnings and error messages output by the unit.

1 Performance Test

This chapter informs you in detail on how to check the AMIQ for compliance with specifications. Please note the general instructions on the test procedure given on page 1.2. The measuring equipment needed for the performance test is listed below, and a test report form is included at the end of this chapter.

Adjusting the unit for compliance with specifications, as well as the measuring equipment needed, is described in chapter 2 of this service manual.

Required Measuring Equipment

Table 1-1 Measuring Equipment for Performance Test

Item	Instrument/ equipment	Required characteristics	Suitable unit	R & S Order No.	Described on page
1	Oscilloscope	Bandwidth > 100 MHz 2 channels	BOL	0374.2000.02	1.4 1.9 1.10 1.10
2	Frequency counter	Frequency min. 100 MHz, Accuracy higher than $1*10^{-6}$, time A-B, resolution min. 10 ps	Philips PM6680		1.3 1.3 1.8
3	AC voltmeter	RMS 25 MHz bandwidth	URE3	0350.5315.03	1.5 1.5 1.7
4	DC voltmeter	+/–5 Volt 0 V resolution min. 0.1 mV	UDS5	0349.1510.02	1.5 1.7
5	Spectrum analyzer	Min. 100 MHz, dynamic range min. 80 dB	FSE	1065.6000.20	1.6 1.8
6	Trigger generator	1 kHz, TTL	APN	0844.6001.04	1.10
7	50 Ω feed-through termination	0.5 W, 0.1%	RAD 50	0844.9352.02	
8	50 Ω BNC connecting cables	Lengths 0.5 m, 1 m, same type of cable for I and Q outputs			
9	9-pin SUB-D adapter	Connection of BER interface for test	see 5.2.12		1.11
10	IEC/IEEE-bus cable	Connection to IEC625/IEEE488	PCK	0292.2013.10	
11	Null-modem cable	9-pin RS232 cable with transposed RX-TX lines		1050.0346.02	
12	Controller	PC/XT/AT industry standard with IEC625/IEEE488 and RS232 interfaces	PSA 5 PSA 15 PSA 17	1006.3008.03 1012.1003.02 1026.1000.03	

Test Procedure

The AMIQ can be operated only by remote control. To check compliance with specifications, therefore, a suitable controller and control software are needed to transmit the commands for the required instrument settings. Transmission may be via the RS232 interface or the IEEE488 interface (see operating manual, chapter 2, "Getting Started").

A warm-up period of at least one hour should be allowed before checking the unit for compliance with specifications.

NOTE: *For the R&S service centers, a suitable DOS program is available for the easy setup of the AMIQ via the IEEE488 bus.*

Power-Up Sequence, Interface Test

Preparation: ➢ Connect the AMIQ to the AC supply and switch the unit on.

Test: On power-up, the AMIQ performs a simple self-test. After this test has run successfully, the *ON* LED lights permanently and the unit is ready to accept commands via the interfaces.

If the *ON* LED is flashing, an error has occurred during the self-test. More detailed information on the error can be requested via `:SYST:ERR?` (see operating manual, chapters 5 and 6).

IEC/IEEE-Bus Interface

Preparation: ➢ Connect the IEC/IEEE-bus interface of the AMIQ to that of the controller via the IEC/IEEE-bus cable.

Test: ➢ Send the character string '*IDN?<CR><NL>' from the controller to the AMIQ and read the answer string from the AMIQ.

The answer string should contain the following message:

'ROHDE & SCHWARZ,AMIQ<Var>,<Ser_Nr>,<Firmware_Vers._Nr>'

RS232 Interface

Preparation: ➢ Connect the RS232 interface of AMIQ to that of the controller via the null-modem cable (see page 1.1, "Required Measuring Equipment").

➢ Set the RS232 interface of the controller to 8 data bits, 1 start bit, 1 stop bit, no parity bit, XON/XOFF handshake and 19200 baud.

Test: ➢ Send the character string '*IDN?<CR><NL>' from the controller to the AMIQ and read the answer string from the AMIQ.

The answer string should contain the following message:

'ROHDE & SCHWARZ,AMIQ<Var>,<Ser_Nr>,<Firmware_Vers._Nr>'

Clock Generation

Preparation:
- Connect frequency counter to clock signal output of AMIQ.
  Select frequency measurement on frequency counter.

Commands:

```
*RST                          Preset
CLOCK 100.000000MHz           For 100 MHz test
(CLOCK 10.000000Hz)           For 10 Hz test
ARM                           Preparation for start
TRIG                          Start
```

Test:
- Measure frequency and compare with specifications in performance test report.

Note:
- The accuracy of the clock frequency at the clock signal output is determined by the internal 10 MHz reference frequency.
  Adjust reference frequency with the command `CAL:ROSC xxxx`
  (xxxx: value between 0 and 4095)
  Read calibration value with the command `CAL:ROSC?`

External Reference Frequency

For adjustment of the internal reference oscillator, synchronization to an external 10 MHz reference frequency is checked. The reference frequency is supplied by the frequency counter. The frequency measured by the frequency counter at the 10 MHz REF output will thus be accurate to the last digit.

Preparation:
- Connect reference frequency output of frequency counter to REF input of AMIQ.
- Connect REF output of AMIQ to test input of frequency counter.
- Select frequency measurement on frequency counter.

Commands:

```
*RST
ROSC:SOUR EXT
ARM
TRIG
```

Test:
- Read frequency to check if reference PLL has locked.

In locked condition, the reading is exactly 10 MHz.

Level and Offset Calibration

The internal level and offset calibration for the I and Q outputs is performed automatically when activated by the corresponding control command. There are various calibration commands for offset, level and the I and Q channels.

Commands:

```
*RST
CAL:ALL?      Calibration of level and offset for I and Q
```

Test:
- Read message from AMIQ.
  If calibration functions properly, AMIQ sends "0", in case of an error "1".
  Information on the error source is obtained by reading the error queue.
  (see operating manual, IEC/IEEE-bus control)

Waveform Memory, Standard Sine Curve

Test principle:

➢ Programming of sine curve with commands sent to AMIQ

The amplitude stored in the AMIQ waveform memory corresponds to 1.0 FS (full scale). The frequency of the sinusoidal signal is determined by the number of samples per period and by the selected clock frequency. The samples available in the waveform memory must be a multiple of the samples needed for the period of the curve. For testing, the whole memory (4000000 samples) is filled, which takes up about 30 seconds.

Sine frequency = clock frequency / samples(period)

Preparation:

➢ Connect oscilloscope to I and Q outputs.

Control:

➢

```
*RST                          Preset
CLOCK 100.0MHz                Clock frequency (100 MHz)
TEST:SDR:WAV SINE             Sine curve
TEST:SDR:PER 10000            Samples per period (10000)
TEST:SDR:PHAS 0               Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000           Sinewave amplitude (1 FS)
TEST:SDR:OFFS 32768           Sinewave offset (0 FS)
TEST:SDR:FILL 4000000         Waveform memory
                              (4000000 samples)
OUTP:I FIX                    Output I: fix mode
OUTP:Q FIX                    Output Q: fix mode
ARM                           Start of output
TRIG
```

Test:

➢ Check sine curve of I and Q outputs on oscilloscope:

frequency 10 kHz, amplitude 1 V_{pp} with 50 Ω feed-through termination

"Fix" Mode

In the *fix* mode, a fixed signal level is present at outputs I and Q which can be varied only by the fine adjustment function of AMIQ. The output level and amplitude balance are checked on a 1 kHz sinusoidal signal at the outputs without terminations. Inaccuracies introduced by the termination are thus avoided. The residual DC offset of the two channels is measured with terminations. It is assumed that the unit has been amplitude- and offset-calibrated (see page 1.3, section "Level and Offset Calibration").

If option AMIQ-B2 (Differential Outputs) is fitted the AMIQ's outputs must be set to „SINGLE" (UNBAL) mode to avoid additional errors due to a non-adjusted option.

➢ `OUTP:TYPE UNBAL`

Output Level

Preparation: ➢ Connect AC voltmeter (RMS) to I or Q output without termination.
Resolution of voltmeter: min. 4-digit

Generation of 1 kHz sinusoidal signal at the I and Q outputs:

Commands:

➢ `*RST`	`Preset`
`CLOCK 10.0MHz`	`Clock frequency (10 MHz)`
`TEST:SDR:WAV SINE`	`Sine curve`
`TEST:SDR:PER 10000`	`Samples per period (10000)`
`TEST:SDR:PHAS 0`	`Phase diff. between I and Q (0)`
`TEST:SDR:AMPL 32000`	`Sinewave amplitude (1 FS)`
`TEST:SDR:OFFS 32768`	`Sinewave offset (0 FS)`
`TEST:SDR:FILL 10000`	`1 period in waveform memory`
`OUTP:I FIX`	`Output I: fix mode`
`OUTP:Q FIX`	`Output Q: fix mode`
`ARM`	`Start of output`
`TRIG`	

Test: ➢ Measure output level of 1 kHz signal of I and Q channels and compare against specifications of test report.

Level Difference

Preparation: Measurement to section "Output Level", page 1.5.

Test: ➢ Determine percentage difference between I and Q output levels.

Level difference [%] = [(level I – level Q)/(level I)]*100%

➢ Compare the resulting level difference against specifications of test report.

Residual DC Offset

Preparation: ➢ Connect DC voltmeter with 50 Ω feed-through termination to I or Q output of AMIQ.

Resolution of DC voltmeter: min. 0.1 mV

Generation of 0 V DC signal (sinewave amplitude 0 FS) at I and Q outputs:

Commands:

➢ `*RST`	`Preset`
`CLOCK 10.0MHz`	`Clock frequency (10 MHz)`
`TEST:SDR:WAV SINE`	`DC curve`
`TEST:SDR:PER 10000`	`Samples per period (10000)`

```
TEST:SDR:PHAS 0                 Phase diff. between I and Q (0)
TEST:SDR:AMPL 00000             Sinewave amplitude (0 FS)
TEST:SDR:OFFS 32768             Sinewave offset (0 FS)
TEST:SDR:FILL 10000             1 period in waveform memory
OUTP:I FIX                      Output I: fix mode
OUTP:Q FIX                      Output Q: fix mode
ARM                             Start of output
TRIG
```

Test: ➢ Measure residual DC offset of I and Q channels and compare against specifications of test report.

Note: *If the DC voltmeter provides accurate residual DC offset measurement with the AC voltage (1 kHz) present, the DC residual offset can be measured without reprogramming the waveform (setting of AMIQ as described in section "Output Level", page 1.5).*

Spurious Free Dynamic Range (SFDR)

The spurious free dynamic range (SFDR) is that range of the spectrum of a signal under test which is free from harmonics or other spurious. It is normally specified in dB referred to the useful signal. In the case of D/A converters, SFDR is dependent on the clock frequency and the resolution and is a measure of the quality of a D/A converter. In measurements without anti-aliasing filter, SFDR is normally considered to be the range up to half the sample frequency (Nyquist/2), and this range is evaluated. Outside this range, aliasing products occur whose level may be considerably lower than the SFDR for reasons inherent in the system.

Preparation: ➢ Connect spectrum analyzer to I or Q output of AMIQ.

Settings on spectrum analyzer:

Start frequency 0 Hz
Stop frequency 5 MHz (Nyquist/2)
Reference level 3.0 dBm
Resolution bandwidth 1 kHz
Video bandwidth 3 kHz

Generation of 1 MHz sinewave signal at I and Q outputs:

Commands: ➢

```
*RST                            Preset
CLOCK 10.0MHz                   Clock frequency (10 MHz)
TEST:SDR:WAV SINE               Sine curve
TEST:SDR:PER 10                 Samples per period (10)
TEST:SDR:PHAS 0                 Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000             Amplitude (1 FS)
TEST:SDR:OFFS 32768             Offset (0 FS)
TEST:SDR:FILL 1000              100 periods in waveform memory
OUTP:I FIX                      Output I: fix mode
OUTP:Q FIX                      Output Q: fix mode
ARM                             Start of output
TRIG
```

Test: ➢ Determine SFDR on spectrum analyzer and compare against specifications of test report.

"Variable" Mode

In this mode, the output level can be set in the range 0 to 1 V peak amplitude (into 50 Ω) separately for the I and Q channel. An electronic attenuator in the AMIQ allows a level variation of 20 dB. Further attenuation can be effected by means of a mechanical 20 dB or 40 dB stage.

Output Level

Preparation: ➢ Connect AC voltmeter (RMS) to I or Q output without termination.
Resolution of voltmeter: min. 4-digit

Generation of 1 kHz sinusoidal signal with 1 V amplitude at I and Q outputs:

Commands: ➢

*RST	Preset
CLOCK 10.0MHz	Clock frequency (10 MHz)
TEST:SDR:WAV SINE	Sine curve
TEST:SDR:PER 10000	Samples per period (10000)
TEST:SDR:PHAS 0	Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000	Amplitude (1 FS)
TEST:SDR:OFFS 32768	Offset (0 FS)
TEST:SDR:FILL 10000	1 periode in waveform memory
OUTP:I VAR	Output I: variable mode
OUTP:I:AMPL 1.0	I amplitude: V_p = 1 V
OUTP:Q VAR	Output Q: variable mode
OUTP:Q:AMPL 1.0	Q amplitude: V_p = 1 V
ARM	Start of output
TRIG	

Test: ➢ Measure 1 V output level of 1 kHz signal for I and Q channels and compare against specifications of test report.

Commands: ➢

OUTP:I:AMPL 0.09999	I ampl.: V_p = 0.1 V (20 dB atten.)
OUTP:Q:AMPL 0.09999	Q ampl.: V_p = 0.1 V (20 dB atten.)

Test: ➢ Repeat measurement with 0.1 V output level of 1 kHz signal for I and Q channels and compare against specifications of test report.

Commands: ➢

OUTP:I:AMPL 0.009999	I ampl.: V_p = 0.01 V (40 dB atten.)
OUTP:Q:AMPL 0.009999	Q ampl.: V_p = 0.01 V (40 dB atten.)

Test: ➢ Repeat measurement with 0.01 V output level of 1 kHz signal for I and Q channels and compare against specifications of test report.

Residual DC Offset

Preparation: ➢ Connect DC voltmeter with 50 Ω feed-through termination to I or Q output of AMIQ. Resolution of DC voltmeter: min. 0.1 mV

Generation of 0 V DC signal (sinewave amplitude 0 FS) at I and Q outputs:

Commands: ➢

*RST	Preset
CLOCK 10.0MHz	Clock frequency (10 MHz)
TEST:SDR:WAV SINE	generate DC voltage
TEST:SDR:PER 10000	Samples per period (10000)
TEST:SDR:PHAS 0	Phase diff. between I and Q (0)
TEST:SDR:AMPL 00000	Amplitude (0 FS)
TEST:SDR:OFFS 32768	Offset (0 FS)
TEST:SDR:FILL 10000	1 period in waveform memory
OUTP:I VAR	Output I: variable mode
OUTP:I:AMPL 1.0	I amplitude: 1 Vp
OUTP:Q VAR	Output Q: variable mode

```
OUTP:Q:AMPL 1.0          Q amplitude: 1 Vp
ARM                      Start of output
TRIG
```

Test: ➢ Measure residual DC offset with 1 V level for I and Q channels and compare against specifications of test report.

Note: *If the DC voltmeter provides accurate residual DC offset measurement with the AC voltage (1 kHz) present, the DC residual offset can be measured without reprogramming the waveform (setting of AMIQ as described in section "Output Level", page 1.7).*

Spurious Free Dynamic Range (SFDR)

(cf. section "Spurious Free Dynamic Range (SFDR)", page 1.6)

Preparation: ➢ Connect spectrum analyzer to I or Q output of AMIQ.
Settings on spectrum analyzer:
Start frequency 0 Hz
Stop frequency 5 MHz (Nyquist/2)
Reference level 3.0 dBm
Resolution bandwidth 1 kHz
Video bandwidth 3 kHz

Generation of 1 MHz sinusoidal signal at I and Q outputs:

Commands: ➢

```
*RST                     Preset
CLOCK 10.0MHz            Clock frequency (10 MHz)
TEST:SDR:WAV SINE        Sine curve
TEST:SDR:PER 10          Samples per period (10)
TEST:SDR:PHAS 0          Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000      Amplitude (1 FS)
TEST:SDR:OFFS 32768      Offset (0 FS)
TEST:SDR:FILL 1000       100 periods in waveform memory
OUTP:I VAR               Output I: variable mode
OUTP:I:AMPL 0.1          I amplitude: 0.1 Vp
OUTP:Q VAR               Output Q: variable mode
OUTP:Q:AMPL 0.1          Q amplitude: 0.1 Vp
ARM                      Start of output
TRIG
```

Test: ➢ Determine SFDR on spectrum analyzer and compare against specifications of test report.

Delay between I and Q Channel (Skew)

The skew is determined by measuring the delay of the two outputs with a suitable counter. To this end, a squarewave signal is to be programmed on both channels of AMIQ.
It should be noted that that normally the counter itself introduces a delay error between test inputs A and B. This error is to be taken into account.
Identical coax cables should be used for connecting the AMIQ outputs to the counter inputs.

Preparation: ➢ Connect counter inputs A and B with I and Q outputs of AMIQ using two identical cables.

Settings on counter:

Time A - B
Trigger level auto
Input impedance 50 Ω
Input coupling DC
Slope rising

Generation of 5 MHz squarewave signal at I and Q outputs:

Commands: ➢

```
*RST                    Preset
CLOCK 10.0MHz           Clock frequency (10 MHz)
TEST:SDR:WAV SQUARE     Squarewave
TEST:SDR:PER 2          Samples per period (2)
TEST:SDR:PHAS 0         Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000     Amplitude (1 FS)
TEST:SDR:OFFS 32768     Offset (0 FS)
TEST:SDR:FILL 1000      500 periods in waveform memory
OUTP:I FIX              Output I: fix mode
OUTP:Q FIX              Output Q: fix mode
OUTP:FILT OFF           Filter off
ARM                     Start of output
TRIG
```

Test: ➢ Determine skew between channels I and Q. To this end, interchange the test cables on the I and Q outputs of AMIQ. The difference in delay measured after interchanging the cables corresponds to the skew of AMIQ. Compare this value against specifications of test report.

Internal Filters

AMIQ has two internal lowpass filters with cutoff frequencies 2.5 MHz and 25 MHz for each channel. These filters are adjusted in production for optimum transmission characteristics as well as amplitude balance and group delay by means of special instruments. Readjustment of the filters with the appropriate instruments is required only in case of repair.

In this test, the filters are checked for proper functioning by measuring the squarewave rise time.

Preparation: ➢ Connect oscilloscope to I and Q outputs.

Generation of 1 MHz squarewave signal at I and Q outputs:

Commands: ➢

```
*RST                    Preset
CLOCK 10.0MHz           Clock frequency (10 MHz)
TEST:SDR:WAV SQUARE     Squarewave
TEST:SDR:PER 10         Samples per period (10)
TEST:SDR:PHAS 0         Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000     Amplitude (1 FS)
TEST:SDR:OFFS 32768     Offset (0 FS)
TEST:SDR:FILL 1000      100 periods in waveform memory
OUTP:I FIX              Output I: fix mode
OUTP:Q FIX              Output Q: fix mode
OUTP:FILT OFF           Filter off
(OUTP:FILT 2.5MHz       Filter 2.5 MHz)
(OUTP:FILT 25MHz        Filter 25 MHz)
ARM                     Start of output
TRIG
```

Test: ➢ Check rise time of squarewave signals on I and Q outputs on oscilloscope for the various filter settings.

The rise times need not be measured exactly. They merely indicate the various filter settings:

The following typical rise times should be obtained:

with filter off	5 ns
with filter 25 MHz	15 ns
with filter 2.5 MHz	150 ns

External Trigger

To check the external trigger, a trigger generator is required which supplies a TTL control signal as trigger signal.
In the gate mode, the signals at the I and Q outputs are switched on and off by the trigger signal. This function can easily be checked on the oscilloscope.

Preparation:

➢ Connect oscilloscope to I and Q outputs.
Apply 1 kHz TTL trigger signal to trigger input of AMIQ.

Generation of 100 kHz sinusoidal signal at I and Q outputs:

Commands:

➢

```
*RST                    Preset
CLOCK 10.0MHz           Clock frequency (10 MHz)
TEST:SDR:WAV SINE       Sinewave
TEST:SDR:PER 100        Samples per period (100)
TEST:SDR:PHAS 0         Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000     Amplitude (1 FS)
TEST:SDR:OFFS 32768     Offset (0 FS)
TEST:SDR:FILL 10000     100 periods in waveform memory
OUTP:I FIX              Output I: fix mode
OUTP:Q FIX              Output Q: fix mode
TRIG:MODE:GAT           Trigger mode: gate
TRIG:SLOP POS           Trigger polarity
TRIG:SOUR EXT           Trigger source: external
ARM                     Start of output
```

Test:

➢ Check I and Q output signals (100 kHz sinewave) of AMIQ on oscilloscope. The output signals are switched on and off synchronously with the external trigger signal.

Marker Outputs

The marker outputs are controlled by programming the two LSBs of the 16-bit waveform memory of the I and Q channel. These bits are automatically programmed in programming the waveforms (see above) for the various tests for compliance with specifications. For testing the marker outputs it is sufficient to check the four marker outputs by means of an oscilloscope. A pulse train must be present at each of the four marker outputs.

Preparation:

➢ Connect oscilloscope to marker outputs 1 to 4 one after the other using a 50 Ω termination.

Generation of 1 kHz sinusoidal signal at the I and Q outputs:

Commands:

```
➢ *RST                          Preset
  CLOCK 10.0MHz                 Clock frequency (10 MHz)
  TEST:SDR:WAV SINE             Sinewave
  TEST:SDR:PER 10000            Samples per period (10000)
  TEST:SDR:PHAS 0               Phase diff. between I and Q (0)
  TEST:SDR:AMPL 32000           Amplitude (1 FS)
  TEST:SDR:OFFS 32768           Offset (0 FS)
  TEST:SDR:FILL 40000           4 periods in waveform memory
  OUTP:I FIX                    Output I: fix mode
  OUTP:Q FIX                    Output Q: fix mode
  ARM                           Start of output
  TRIG
  OUTP:MARK1 ON                 switch on markers 1 to 4
  OUTP:MARK2 ON
  OUTP:MARK3 ON
  OUTP:MARK4 ON
```

Test:

➢ Check pulse train and pulse amplitude for each marker output.
Pulse amplitude at 50 Ω feed-through termination: typ. 2 V
Pulse period (corresponding to clock frequency): 100 ns

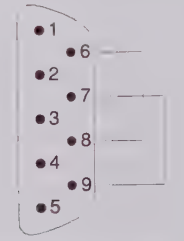
BER Interface

The BER interface is used for performing bit error rate measurements by means of the AMIQ. For these measurements, the software option AMIQ-B1 is required.

The interface is to be checked irrespective of whether this option is implemented or not. The inputs and outputs of the interface are interconnected via an adapter and checked for proper functioning.

Preparation:

➢ Prepare adapter (SUB-D, 9-pin, female) as shown below and plug onto BER interface of the instrument.



SUB-D connector female

Commands:

```
➢ *RST                          Preset
  TEST:BERT?                    Test BER interface
```

Check:

If the BER interface is functioning properly, "0" is returned by AMIQ.

If an error is found, "1" is returned.

More detailed information on the error can be queried with `:SYST:ERR?`.

Bias Voltage and Offset

The operating point of a DUT can be adjusted by superimposing a DC voltage upon the output signal. This requires option AMIQ-B2 (Differential Outputs) to be fitted. As the residual offset voltage of AMIQ-B2 can not be compensated for during calibration, it must be tested separately.

Preparation:

➢ Connect DC voltmeter to all four output sockets in succession. The SMB input sockets of option AMIQ-B2 are terminated into 50 Ω.

Commands:

➢
```
:OUTP:TYPE BAL
:OUTP:I:BIAS -2.5V
:OUTP:I:BIAS 2.5V
:OUTP:Q:BIAS -2.5V
:OUTP:Q:BIAS 2.5V
:OUTP:I:BIAS 0V
:OUTP:Q:BIAS 0V
```

Check:

➢ If the option operates correctly the voltages of –2.5 V and +2.5 V must be measured at the outputs on open circuit. The non-inverting and the corresponding inverting outputs show the same voltage, I and Q can be set independent from each other (tolerance ±10 mV). The last two commands set a bias voltage of 0 V at all four outputs. The offset volage measured now must not exceed ±0.1 mV.

Test Report

ROHDE & SCHWARZ	I/Q Modulation Generator AMIQ	1110.2003.02
Serial No.:		
Test engineer:		
Date:		
Signature:		

Table 1-2 Test Report

Item No.	Characteristic	Measuremt. to page	Min.	Actual	Max.	Unit
1	Power-up sequence	1.2	------		------	------
2	IEC625 / IEEE488 interface	1.2	------		------	------
3	RS232 interface	1.2	------		------	------
4	Clock generation Frequency 100 MHz Frequency 10 Hz	1.3	 99.99900 9.999900		 100.001 10.0001	 MHz Hz
5	External synchronization	1.3	------		------	------
6	Level and offset calibration	1.3	------		------	------
7	Waveform memory, sinewave	1.4	------		------	------
8	Fix mode Output level, I channel Output level, Q channel	1.5	 0.7000 0.7000		 0.7142 0.7142	 V_{rms} V_{rms}
9	Level difference (I-Q)	1.5	- 0.2		+ 0.2	%
10	Residual DC offset, I channel Residual DC offset, Q channel	1.5	- 0.5 - 0.5		+ 0.5 + 0.5	mV mV
11	SFDR, I channel SFDR, Q channel	1.6	70 70		------ ------	dB dB
12	Variable mode Output level, I channel 1V Output level, Q channel	1.7	 1.386 1.386		 1.443 1.443	 V_{rms} V_{rms}
	Output level, I channel 0.1V Output level, Q channel	1.7	0.1386 0.1386		0.1443 0.1443	V_{rms} V_{rms}
	Output level, I channel 0.01V Output level, Q channel	1.7	0.01386 0.01386		0.01443 0.01443	V_{rms} V_{rms}
13	Residual DC offset, I channel Residual DC offset, Q channel	1.7	- 5 - 5		+ 5 + 5	mV mV
14	SFDR, I channel SFDR, Q channel	1.8	50 50		------ ------	dB dB
15	Skew, I-Q channel	1.8	- 0.5		+ 0.5	ns

Item No.	Characteristic	Measuremt. to page	Min.	Actual	Max.	Unit
16	Internal filters off 2.5 MHz 25 MHz	1.9	 ------ ------ ------		 ------ ------ ------	 ------ ------ ------
17	External trigger	1.10	------		------	------
18	Marker outputs Marker 1 Marker 2 Marker 3 Marker 4	1.10	 ------ ------ ------ ------		 ------ ------ ------ ------	 ------ ------ ------ ------
19	BER interface	1.11	------		------	------
If option AMIQ-B2 (Differential Ouputs) is fitted the following test points are added:						
20	Differential Outputs, residual offset Output I Output $\overline{I}$ Output Q Output $\overline{Q}$	1.11	 –0.1 –0.1 –0.1 –0.1		 +0.1 +0.1 +0.1 +0.1	 V V V V
21	Setting range for bias voltage Output I and $\overline{I}$ Output I and $\overline{I}$ Output Q and $\overline{Q}$ Output Q and $\overline{Q}$	1.11	 –2.51 +2.49 –2.51 +2.49		 –2.49 +2.51 –2.49 +2.51	 V V V V

2 Adjustment

This chapter describes the filter and I-Q adjustments of AMIQ including the adjustment of option AMIQ-B2 (if fitted) for the purpose of restoring compliance with specifications.

An overview of the I-Q adjustment facilities of AMIQ will be found in chapter four of the operating manual in the form of a simplified block diagram.

Required Measuring Equipment

Table 2-1 Measuring Equipment for Adjustment of AMIQ

Item	Instrument/ equipment	Required characteristics	Suitable unit	R & S Order No.	Described on page
1	Vector network analyzer	500 kHz to 20 MHz	ZVRE, basic unit SWR bridges 50 Ω, passive, ZVR-A55 Step attenuator, receiver, 2 ports, ZVR-B24	1043.0009.50 1043.7755.20 1044.0025.22	2.1 2.2
2	2 N/SMB test cables		See "Conversion" in section "Preparation of Network Analyzer"		2.1
3	SMB calibration kit	Through, open, short, match	See "Calibration" in section "Preparation of Network Analyzer"		2.1
4	Frequency counter	Function TIME A-B, resolution 10 ps	Philips PM6680		2.7
5	DC voltmeter	±5 V, resolution 0,1 mV	UDS5	0349.1510.02	2.9

Preparation of Network Analyzer

Conversion:

➢ Adapt network analyzer from N to SMB connectors.

The inputs and outputs of the filters incorporated in AMIQ are accessible via SMB connectors on the IQ_ANALOG/DIGITAL_UNIT module. For this reason, the two test ports of the network analyzer, too, must be adapted from N or BNC to SMB connectors by means of adapter cables.

Calibration:

➢ Calibrate network analyzer for SMB connectors:

Before measurements are performed, the network analyzer must be calibrated for the SMB connectors. For R&S Network Analyzer ZVRE, this is done by means of the **TOSM** procedure (**t**hrough, **o**pen, **s**hort, **m**atch).

Through: The cables of ports 1 and 2 are connected with each other.
Open: The cable of port 1 or 2 is open.
Short: The cable of port 1 or 2 is short-circuited.
Match: The cable of port 1 or 2 is terminated with 50 Ω.

By this calibration, all measurement uncertainties involved in the test setup consisting of the network analyzer and the SMB cables are taken into account. The subsequent measurement reveals the frequency response of the DUT connected between the SMB cables.

For calibration, an SMB calibration kit is required:

Through	SMB connector/connector adapter (R&S Order No. 0017.6259)
Open	SMB cable is open
Short	SMB connector, short-circuited with wire
Match	50 Ω termination (R&S Order No. 0521.9401, female) + SMB connector/connector adapter or SMB connector terminated with 50 Ω, 0.1%.

Adjustment of Filters

Preparation:

➢ Select transmission measurement S21 on network analyzer (see section "Adjustment of 25 MHz Filters"). Connect output (port 1 on ZVRE) to input of filter on IQ board (X13, X8, X17, X26). Connect output of filter (X15, X6, X23, X24) to input (port 2 on ZVRE).

Commands:

➢

```
*RST                        Preset
CLOCK 10.0MHz               Clock frequency (10 MHz)
TEST:SDR:WAV Sine           Curve (DC)
TEST:SDR:PER 4              Samples per period (4)
TEST:SDR:PHAS 0             Phase diff. between I and Q (0)
TEST:SDR:AMPL 0000          Amplitude (0 FS)
TEST:SDR:OFFS 32768         Offset (0 FS)
TEST:SDR:FILL 1000          250 periods in waveform memory
OUTP:I FIX                  Output I: fix mode
OUTP:Q FIX                  Output Q: fix mode
OUTP:FILT OFF               Filter off
ARM                         Start of output
TRIG
```

Notes: *The IQ_ANALOG/DIGITAL_UNIT module must be fitted in AMIQ since the intermediate panel acts like a shielding cover on the solder side.*

The shielding covers on the component side have an effect in adjustment. It is sufficient if the covers rest on the shielding panels during adjustment; they need not be screwed on.

Only non-metallic tools may be used for adjustment.

Adjustment of 25 MHz Filters

The passband of the filters is adjusted for flat frequency response of amplitude and group delay.

To reduce the delay and magnitude errors of the filters to a minimum, both channels must be adjusted in each case. First the I channel filter is to be adjusted. The frequency response curves are stored. Then the Q channel filter is adjusted. The frequency response of the two filters should be as identical as possible.

Note: *Adjustment of the filters is required only when a component in the signal path of the filters has been replaced.*

Preparation:

➢ Settings on network analyzer:

SWEEP	LOG SWEEP
START	500 kHz
STOP	50 MHz
IF BANDWIDTH	1 kHz
NUMBER OF POINTS	401
CH1:	
MEAS	S21 FWD TRANS
FORMAT	MAGNITUDE
SCALE - MAX VALUE	+0.25 dB
SCALE - MIN VALUE	–0.25 dB
CH2:	
MEAS	S21 FWD TRANS
FORMAT	GROUP DELAY
SCALE - MAX VALUE	50 ns
SCALE - MIN VALUE	45 ns
STEP APERTURE	10
TRACE - SMOOTHING	ON
TRACE - SMOOTHING APERTURE	5%
Generator level	–10 dBm
Attenuator on PORT2	10 dB

➢ Carry out calibration.

Adjustment of I Filter

Connection:

➢ Connect I filter:

➢ Connect port 1 of network analyzer to X13 and port 2 to X15.

Adjustment:

➢ Magnitude (MAG):
Use **C190** to adjust for flat frequency response.
Tolerance: ±0.05 dB up to 20 MHz
Reference: value at 500 kHz, typically –0.025 dB

➢ Group delay (DLY):
Use **C189** to adjust for flat frequency response in the range 1 MHz to approx. 7 MHz.
Use **L79** to adjust for flat frequency response up to 20 MHz. Readjust with **C189**.

Tolerance:

±250 ps from 1 MHz to 20 MHz
Reference: value at 1 MHz, typically 48 ns

➢ Readjust magnitude (MAG) with **C190**.

Note:

The typical value of 48 ns at 1 MHz should be attained. If this is not the case, it may not be possible to adjust the Q filter.

➢ Store and display the two curves.

Adjustment of Q Filter

Connection:

- ➢ Connect Q filter:
- ➢ Connect port 1 of network analyzer to X17 and port 2 to X23.

Adjustment:

- ➢ Magnitude (MAG):
  Use **C192** to adjust for flat frequency response.
  Tolerance: ±0.05 dB up to 20 MHz
  Reference: value at 500 kHz, typically -0.025 dB

The difference between I-MAG and Q-MAG should be as small as possible. A small vertical offset (ie a constant difference in gain) between the curves is permissible as absolute level accuracy is subsequently corrected by the software.

- ➢ Group delay (DLY):
  Use **C191** to adjust for flat frequency response in the range 1 MHz to approx. 7 MHz.
  Use **L80** to adjust for flat frequency response up to 20 MHz. Readjust with **C191**.

Tolerance: ±250 ps from 1 MHz to 20 MHz. Reference: value at 1 MHz.

- ➢ Readjust magnitude (MAG) with **C192**.
  The difference between I-DLY and Q-DLY should be as small as possible.

The I-DLY and Q-DLY values should be identical in the range 1 MHz to 10 MHz. In this case, a small vertical offset (difference in group delay) between the two channels is undesirable since this offset cannot be subsequently corrected by the software.

Adjustment of 2.5 MHz Filters

The passband of the filters is adjusted for flat frequency response of amplitude and group delay.

To reduce the delay and magnitude errors of the filters to a minimum, both channels must be adjusted in each case. First the I channel filter is to be adjusted. The frequency response curves are stored. Then the Q channel filter is adjusted. The frequency response of the two filters should be as identical as possible.

Note: *Adjustment of the filters is required only when a component in the signal path of the filters has been replaced.*

Preparation:

- ➢ Settings on network analyzer:

SWEEP	LOG SWEEP
START	500 kHz
STOP	5 MHz
IF BANDWIDTH	1 kHz
NUMBER OF POINTS	401
CH1:	
MEAS	S21 FWD TRANS
FORMAT	MAGNITUDE
SCALE - MAX VALUE	+0.25 dB
SCALE - MIN VALUE	–0.25 dB
CH2:	
MEAS	S21 FWD TRANS
FORMAT	GROUP DELAY
SCALE - MAX VALUE	50 ns
SCALE - MIN VALUE	45 ns
STEP APERTURE	10

TRACE - SMOOTHING	ON
TRACE - SMOOTHING APERTURE	5%
Generator level	–10 dBm
Attenuator on PORT2	10 dB

➢ Carry out calibration.

Adjustment of I Filter

Connection
➢ Connect I filter:
➢ Connect port 1 of network analyzer to X8 and port 2 to X6.

Adjustment:
➢ Magnitude (MAG):
Use **C241** to adjust for flat frequency response.
Tolerance: ±0.05 dB up to 2 MHz
Reference: value at 500 kHz, typically -0.025 dB

➢ Group delay (DLY):
Use **C376** to adjust for flat frequency response from approx. 700 kHz to 1 MHz.
Use **L9** to adjust for flat frequency response up to 2 MHz.
Readjust with **C376** for frequencies <1 MHz.

Tolerance:
±2.5 ns up to 2 MHz. Reference: value at 800 kHz, typically 410 ns

➢ If necessary, readjust magnitude (MAG) with **C241**.

Note:
The typical value of 410 ns at 800 kHz should be attained. If this is not the case, it may not be possible to adjust the Q filter.

➢ Store and display the two curves.

Adjustment of Q Filter:

Connection:
➢ Connect Q filter:
➢ Connect port 1 of network analyzer to X26 and port 2 to X24.

Adjustment:
➢ Magnitude (MAG):
Use **C242** to adjust for flat frequency response.
Tolerance: ±0.05 dB up to 2 MHz
Reference: value at 500 kHz, typically -0.025 dB

The difference between I-MAG and Q-MAG should be as small as possible. A small vertical offset (ie a constant difference in gain) between the curves is permissible as absolute level accuracy is subsequently corrected by the software.

➢ Group delay (DLY):
Use **C377** to adjust for flat frequency response from approx. 700 kHz to 1 MHz.
Use **L10** to adjust for flat frequency response up to 2 MHz.
Readjust with **C377** for frequencies <1 MHz.

Tolerance:
±2.5 ns up to 2 MHz. Reference: value at 800 kHz

➢ If necessary, readjust magnitude (MAG) with **C242**.

The difference between I-DLY and Q-DLY should be as small as possible.

The I-DLY and Q-DLY values should be identical in the range 800 kHz to 1 MHz. In this case, a small vertical offset (difference in group delay) between the two channels is undesirable since this offset cannot be subsequently corrected by the software.

I/Q Adjustment

I/Q Skew Adjustment

Two tunable RC elements in AMIQ make it possible to shift the DAC clock edges of the I and Q channels relative to each other (see circuit diagram, sheet 10). This allows a variation in delay between the output signal of the I channel and that of the Q channel.

The delay can be varied by the *Skew* user correction function (command :CORR:SKEW, see operating manual, chapter 4, section "I/Q Adjustment"). With this function, the capacitance of the RC elements is varied by means of a D/A converter and varactors. Skew adjustment is to be made with R756 such that minimum skew is obtained at the output of AMIQ when the user correction is set to zero.

Adjustment is made using a programmed squarewave signal at a clock frequency of 50 MHz. It should be noted that the counter normally has a constant inherent error. This error can be determined by applying identical signals to inputs A and B.

Preparation:

➢ Connect counter inputs A and B to the I and Q outputs of AMIQ using two identical cables.

Settings on counter:

Time	A - B
Trigger level	Auto
Input impedance	50 Ω
Input coupling	DC
Slope	Rising

Generation of 12.5 MHz squarewave signal at I and Q outputs:

The *RST (Preset) command sets all user correction values to zero.

Commands:

➢

```
*RST                          Preset
CLOCK 50.0MHz                 Clock frequency (50 MHz)
TEST:SDR:WAV SQUARE           Squarewave
TEST:SDR:PER 4                Samples per period (4)
TEST:SDR:PHAS 0               Phase diff. between I and Q (0)
TEST:SDR:AMPL 32000           Amplitude (1 FS)
TEST:SDR:OFFS 32768           Offset (0 FS)
TEST:SDR:FILL 1000            250 periods in waveform memory
OUTP:I FIX                    Output I: fix mode
OUTP:Q FIX                    Output Q: fix mode
OUTP:TYPE UNBAL               Outputs to unbalanced mode
OUTP:FILT OFF                 Filter off
ARM                           Start of output
TRIG
```

Adjustment:

➢ Use **R756** to adjust the skew between the I and Q channels so that the measured skew between the I and Q channels changes only minimally when the cables at the AMIQ outputs are interchanged.

The absolute reading is dependent on the delay of the counter and not relevant in the measurement.

Tolerance:

➢ Maximum variation of measured delay after interchanging I and Q channels:
+/- 0.1 ns

I/Q Amplitude and Offset Adjustment

The amplitude and residual offset voltages for the I and Q channels are automatically adjusted in AMIQ after activating the corresponding commands.

In adjustment, the DC voltage at the I and Q outputs is measured using a high-precision 16-bit A/D converter, and the amplitude and the residual offset are adjusted by means of electronic controls in AMIQ. In amplitude adjustment, the waveform D/A converter is programmed with the DC voltage value that exactly corresponds to the full-scale peak amplitude value of the D/A converter. Analogously, to minimize the residual offset, a zero line is programmed for the waveform D/A converter.

In automatic adjustment, offset and gain errors of the filters are adjusted too. Any external filters connected are included in the adjustment.

The following control commands are available for automatic adjustment:

Commands:

➢ `CAL:ALL?`	Amplitude and offset adjustment for I and Q
`CAL:AMPL?`	Amplitude adjustment for I and Q
`CAL:AMPL:I?`	Amplitude adjustment for I
`CAL:AMPL:Q`	Amplitude adjustment for Q
`CAL:OFFS?`	Offset adjustment for I and Q
`CAL:OFFS:I?`	Offset adjustment for I
`CAL:OFFS:Q`	Offset adjustment for Q

If one of these operations is carried out error-free, "0" is returned. If an error occurs, a value unequal to 0 is returned (see chapter 6 of operating manual).

The correction values thus determined for amplitude and offset are stored in the EEPROM of AMIQ. The values are overwritten when automatic adjustment is activated again.

Adjustment of Measurement Accuracy of Internal A/D Converter

The internal 16-bit A/D converter for automatic amplitude and offset adjustment is operated with a precision reference voltage so that normally no correction of measured values is required. A new correction factor can be entered in case of repair and for increasing measurement accuracy. The results obtained with the internal converter are then multiplied by this factor.

The internal A/D converter has a resolution of approx. 76 µV. The correction factor should be changed only if a high-precision, calibrated AC voltmeter is available for subsequent amplitude measurement. If such a voltmeter is available, the output amplitude of AMIQ can be accurately adjusted to the nominal value by entering the correction factor.

To avoid measurement errors resulting from inaccurate termination, the output amplitude is measured in open-circuit condition (1 kHz).

Preparation: ➢ Connect I or Q output of AMIQ to AC voltmeter (do not use a termination).

Generation of 1 kHz sinusoidal signal at I and Q outputs:

The *RST (Preset) command sets all user correction values to zero.

Commands:

```
➢ *RST                          Preset
  CLOCK 10.0MHz                 Clock frequency
  TEST:SDR:WAV SINE             Sinewave
  TEST:SDR:PER 10000            Samples per period
  TEST:SDR:PHAS 0               Phase diff. between I and Q (0)
  TEST:SDR:AMPL 32000           Amplitude (1 FS)
  TEST:SDR:OFFS 32768           Offset (0 FS)
  TEST:SDR:FILL 40000           4 periods in waveform memory
  OUTP:I FIX                    Output I: fix mode
  OUTP:Q FIX                    Output Q: fix mode
  OUTP:FILT OFF                 Filter off
  ARM                           Start of output
  TRIG
```

Amplitude adjustment:

```
  CAL:DIAG 1.000                Correction factor for
                                A/D converter
  CAL:AMPL?                     I and Q amplitude adjustment
  CAL:DIAG 1.xxx                New correction factor
  CAL:AMPL?                     Readjustment of amplitude
```

Adjustment:

- ➢ Measure amplitude of sinusoidal signal (1 kHz) and determine deviation from nominal value. From the deviation, determine correction factor for A/D converter. Values above 1 will decrease the amplitude, values below 1 will increase the amplitude.
- ➢ Repeat automatic adjustment of amplitude and measure amplitude. If the result does not agree with the nominal value of V_{rms} = 0.7071 V, the procedure can be repeated.

Note:

- ➢ If the correction factor is changed by the maximum possible amount (correction factors between 0.9 and 1.1 are permissible), internal amplitude adjustment may no longer be possible. AMIQ will send a corresponding error message in response to a query.

Offset Adjustment for Option AMIQ-B2

The AMIQ's internal offset adjustment performed during calibration affects only the two outputs of the I/Q board. The outputs of option AMIQ-B2 must therefore be individually adjusted to zero with the potentiometers R1, R2, R3 and R4.

- ➢ Terminate both signal entries of the option using SMB 50Ω.
- ➢ Set I/Q outputs to *balanced* mode (`:OUTP:TYPE BAL`)
- ➢ Activate outputs (*fix* mode) (`:OUTP:I FIX`), (`:OUTP:Q FIX`)
- ➢ Set bias voltages to zero (`:OUTP:I:BIAS 0V`)
  (`:OUTP:Q:BIAS 0V`)
- ➢ Connect DC voltmeter to the outputs I, $\overline{I}$, Q and $\overline{Q}$ successively and adjust DC voltage to 0 V (EMF) using the potentiometers R1, R2, R3 and R4.

  Tolerance: 0 V ± 0.1 mV

Diagnosis

AMIQ incorporates a diagnostic function to facilitate troubleshooting. In this process, the internal A/D converter is connected to 16 different test points via a multiplexer. Measured values are output via the interface.
The individual functions of AMIQ can then be checked by means of the circuit diagram.

Test Points

No. <n>	Measurement function	Division factor	Sheet of circuit diagram	Value/Range
0	Ground reference		27	0 V
1	V_{ref} for A/D converter	(1/2 * REF 2.5 V)	27	1.25 V
2	V_{ref} for adjustment DACs		26	1.2 V
3	10 MHz VTCXO voltage	(1/2 * V-VTCXO)	19	0 to 2.5 V
4	VCO control voltage	(1/10 * V-VCO)	20	0 to 1.8 V
5	I DAC, output		12	–1 V to +1 V
6	Q DAC, output		15	–1 V to +1 V
7	External I filter, input		13	–1 V to +1 V
8	External Q filter, input		16	–1 V to +1 V
9	I amplitude variation, output		14	–2 V to +2 V
10	Q amplitude variation, output		17	–2 V to +2 V
11	I output, DC		14	–1 V to +1 V (fix) –2 V to +2 V (var)
12	I RF amplitude, RF detector		14	0 V to +1 V (fix) 0 V to +2 V (var)
13	Q output, DC		17	–1 V to +1 V (fix) –2 V to +2 V (var)
14	Q RF amplitude, RF detector		17	0 V to +1 V (fix) 0 V to +2 V (var)
15	I/Q phase difference (zero-phase meter for I and Q)		14	0 to 2.5 V

Test points on the I/Q board can be queried with the following command:

Command: ➢ `DIAG:TPO<n>?` Measured value query for test point n

By this command, the desired test point n is selected, the internal A/D converter is started and the result output. For repeated measurement, the command must be repeated.

Moreover, the ID of the I/Q board and thus the modification level can be queried with the following command:

Command: ➢ `DIAG:ABO:ID?` Query of board ID

Selftest of AMIQ

Starting with firmware version 2.10, the I/Q board's performance and compliance with the technical data can be tested automatically without using any additional test equipment. This selftest performs the necessary instrument settings, sets the diagnosis multiplexer to the individual internal diagnosis points, measures the voltages generated at these points and compares them with the rated values.

The selftest is started with the „`*TST?`" command.

- If none of the measured values exceeds the tolerance limits AMIQ responds with a „0". If the instrument is controlled via WinIQSIM the final message „selftest completed successfully" is output if no error was detected.
- On the other hand, if one or several of the measured values (e.g. in the case of successive errors) exceed the tolerance limits, AMIQ responds with a „1". If the instrument is controlled via WinIQSIM or via AMIQ's service program the individual error messages containing the wrong measured values are output successively after the selftest is completed.

Whether a minor violation of the permissible range (possibly due to aging or missing calibration) or a completely wrong value (due to a hardware defect, e.g. defective modules) occurred can be decided by comparing with the following table listing the rated values together with the permissible ranges.

Test Procedure

The selftest is performed in several steps:

- The current device state is saved, the outputs are switched off to avoid damage of any devices which may be connected to AMIQ (only if a complete selftest is called up).
- The diagnosis system test itself (its own ground and reference voltages).
- The setting ranges of the offset corrections are tested.
- The calibration settings are used to measure the current offset voltages in the individual branches of the electric network.
- The reference and VCO frequencies are checked.
- The signal levels are tested by means of an applied sinewave signal.
- The attenuator is tested with a DC level.
- A rectangular signal with a phase shift of 180° between I and Q is applied to test whether the filters in both (I and Q) channels are equal.
- The device state saved before the selftest was started is restored.

Table of Rated Values and Permissible Ranges:

To perform a statistical analysis of a detected error the individual test points or groups of test points can be selected separately. These diagnosis commands are explained in detail in chapter 6 of the AMIQ operating manual. If option AMIQ-B2 (differential outputs) is fitted the instrument must be set to SINGLE mode (UNBal), otherwise the level settings are changed.

Test function	Test point (see circuit diagram)	Rated value [V]	Permissible range [V]
Ground diagnosis system	0	0,0	-0,005 ... +0,005
Diagnosis reference	1	1,25	+1,24 ... +1,26
DAC reference voltage	2	1,235	+1,22 ... +1,25

Test function	Test point (see circuit diagram)	Rated value [V]	Permissible range [V]
I-offset adj. (FIX) with 0000	5	0,1235	+0,1 ... +0,147
I-offset adj. (FIX) with 4095	5	-0,1235	-0,147 ... -0,1
Q-offset adj. (FIX) with 0000	6	0,1235	+0,1 ... +0,147
Q-offset adj. (FIX) with 4095	6	-0,1235	-0,147 ... -0,1
I-offset adj. (VAR) with 0000	9	-0,3	-0,56 ... -0,04
I-offset adj. (VAR) with 4095	9	+0,3	+0,04 ... +0,56
Q-offset adj. (VAR) with 0000	10	-0,3	-0,56 ... -0,04
Q-offset adj. (VAR) with 4095	10	+0,3	+0,04 ... +0,56
I-offset (FIX) LIN	11	0,0	-0,005 ... +0,005
I-offset (FIX) 2.5 MHz	11	0,0	-0,005 ... +0,005
I-offset (FIX) 25 MHz	11	0,0	-0,005 ... +0,005
Q-offset (FIX) LIN	13	0,0	-0,005 ... +0,005
Q-offset (FIX) 2.5 MHz	13	0,0	-0,005 ... +0,005
Q-offset (FIX) 25 MHz	13	0,0	-0,005 ... +0,005
Reference frequency with 0000	3	0,0	-0,005 ... +0,005
Reference frequency with 4095	3	2,5	+2,3 ... +2,7
VCO with 51 MHz	4	0,225	+0,15 ... +0,3
VCO with 100 MHz	4	1,45	+1,3 ... +1,6
I-level (FIX) LIN with 0000	12	1,3	+1,17 ... +1,43
I-level (FIX) LIN with 4095	12	0,76	+0,61 ... +0,91
I-level (FIX) 2.5 MHz with 0000	12	1,3	+1,17 ... +1,43
I-level (FIX) 2.5 MHz with 4095	12	0,76	+0,61 ... +0,91
I-level (FIX) 25 MHz with 0000	12	1,3	+1,17 ... +1,43
I-level (FIX) 25 MHz with 4095	12	0,76	+0,61 ... +0,91
Q-level (FIX) LIN with 0000	14	1,3	+1,17 ... +1,43
Q-level (FIX) LIN with 4095	14	0,76	+0,61 ... +0,91
Q-level (FIX) 2.5 MHz with 0000	14	1,3	+1,17 ... +1,43
Q-level (FIX) 2.5 MHz with 4095	14	0,76	+0,61 ... +0,91
Q-level (FIX) 25 MHz with 0000	14	1,3	+1,17 ... +1,43
Q-level (FIX) 25 MHz with 4095	14	0,76	+0,61 ... +0,91
I-level (VAR) with 0000	12	2,27	+1,82 ... +2,72
I-level (VAR) with 4095	12	2,27	+1,82 ... +2,72
Q-level (VAR) with 0000	14	2,27	+1,82 ... +2,72
Q-level (VAR) with 4095	14	2,27	+1,82 ... +2,72
I-attenuator -20 dB	11	0,1	+0,08 ... +0,12

Test function	Test point (see circuit diagram)	Rated value [V]	Permissible range [V]
I- attenuator -40 dB	11	0,01	+0,005 ... +0,015
Q- attenuator -20 dB	13	0,1	+0,08 ... +0,12
Q- attenuator -40 dB	13	0,01	+0,005 ... +0,015
Lowpass 2.5 MHz I/Q	15	> 2,0	–
Lowpass 25 MHz I/Q	15	> 2,0	–

The numbers 0000 and 4095 denote the data word of the corresponding DAC responsible for the level or offset setting.

3 Repair

This chapter describes the hardware of AMIQ as well as simple measures for repair and fault diagnosis (see chapter 8 of operating manual). Repair measures include in particular the replacement of modules. For fault diagnosis, a group of service commands is available that allow direct hardware settings and queries.

The fitting of options and updating of software are dealt with in chapter 4 of this service manual. Chapter 4 of the operating manual provides an overview of the AMIQ I/Q adjustment facilities by means of a simplified block diagram.

Replacement of Modules

Warning!

Disconnect unit from AC supply before opening the case. Observe the safety instructions given at the beginning of this manual.

Make sure that cables are neither damaged nor disconnected when putting the casing back in place.

Hardware of AMIQ

AMIQ consists of an industry-compatible PC (in the upper part of the unit) and the AMIQ hardware (IQ board). The PC contains no VGA card. To make settings on the PC, therefore, a monitor card, monitor and keyboard must be connected.

Monitor and monitor card

To make settings on the PC, a monitor card for a PCI slot and monitor are required. The monitor card and the monitor need not have any special characteristics; they must be capable of displaying BIOS and DOS messages (see section "Setting of BIOS"). For installation, the rear cover of the monitor card is to be removed and the monitor connected to the plugged card.

Keyboard

A keyboard with a PS/2 connector is needed. There is no special keyboard driver installed, so the keyboard assignment is international. The keyboard is to be connected to X12.

Replacement of PC Board

The PC board is a socket 7 board in ATX format. The jumpers are to be set in accordance with the enclosed board documentation. The PCI bus clock is to be set to 60 MHz and the CPU as required for its performance. Replace PC board as follows:

- Switch unit off and disconnect it from the AC supply. Unscrew rear feet and withdraw casing towards the rear.
- Unplug ISA bus adapter. Do not touch contacts.
- Unplug cables for loudspeaker, floppy disk drive and hard disk. Disconnect ATX power connector.
- Remove PC board screws and slide, if any).
- Swivel board with small rear cover out of unit towards the front.

- Unscrew rear cover from old ATX board and screw it to new board. Stick adhesive rubber spacers to solder side of new board (4 spacers: R&S Order No.: 0265.4390.00), one in the middle below socket 7, one in the middle of the board, one at the hard disk connectors, and one on the corner pointing towards the power board.
- Remove memory, CPU and CPU cooler from old board and mount them on new board.
- Fit and fix new board; mount slide as required for board size.
- Plug cables for loudspeaker, floppy disk drive and hard disk. Observe correct polarity. The hard disk is to be connected to IDE port 1 (or *primary*). Plug ATX power connector, lay cables neatly and secure them by means of cable ties.
- Connect ISA bus adapter. Do not touch contacts.
- Connect unit to AC supply and switch it on. The built-in PC board should now signal on the monitor. Check BIOS settings.
- Reassemble unit. Take care not to damage any cables.

Replacement of Battery on PC Board

The battery of the type CR2032 is accommodated on the controller in the upper part of the unit. Replace battery as follows:

- Switch unit off and disconnect it from the AC supply. Unscrew rear feet and withdraw casing towards the rear.
- Remove old battery from its holder and insert new battery (observe correct polarity).
- Connect monitor and keyboard (see above).
- Connect unit to AC supply and switch it on. The built-in PC board should now signal on the monitor. Check BIOS settings.
- Reassemble unit.

Setting of BIOS

- Stop startup procedure by pressing DEL key and go to setting menu for BIOS.
- Select 'Default' or AUTO in BIOS setting menu, then set hard disk by means of AUTO DETECT'. If BIOS allows speed setting of the PCI bus, set bus to 60 MHz (but not faster for reasons of thermal stability). For detailed information on BIOS setting please refer to enclosed (original) information on PC motherboard.
- Set boot sequence to C:,A:.

Note: *The information on the PC motherboard is enclosed as an additional document with the Rohde & Schwarz equipment documentation.*

Replacement of Hard Disk

- Switch unit off and disconnect it from AC supply. Screw off rear feet and withdraw casing towards the rear.
- Unplug and remove hard disk.
- Plug new hard disk on adapter (make sure that connection is correct), mount adapter on supporting panel and fit it into AMIQ.
- Connect monitor and keyboard (see above).
- Set boot sequence A:,C: in BIOS. To this end, press DEL to go to BIOS and set boot sequence in setting menu.
- Sign on new hard disk with BIOS by means of AUTO DETECT.
- The hard disk must be partitioned and formatted, and the operating system must be installed. For this, insert disk labelled "**AMIQ Preparation Disk**" and switch unit on. Press <Enter> on keyboard twice.

Answer the messages and queries below as follows:

Message / Query	**Answer**
1st hard disk sector has no boot sector ID	Y
Select options: 1. Create DOS partition 2. Delete DOS partition 3. Select bootable partition	Select 1
Select options: 1. Create DOS primary partition 2. Create DOS extended partition	Select 1
Use cylinders 0-523 for DOS...	Y (test takes a few minutes)
Enter disk label....	<Enter>
Select options: 1. Create DOS partition 2. Delete DOS partition 3. Select bootable partition 4. Rewrite master boot record	ESC (AMIQ is booted anew)

Now the hard disk is formatted.
Answer the messages and queries below as follows:

Message / Query	**Answer**
	<Enter>
Warning: all data on C: will be lost	Y and twice <enter>
The installation program will ..... (The process takes about 5 min)	<Enter>
Enter serial number	Enter serial number, then <Control> Y <Enter>
Control serial number	Confirm with Y

Message / Query	Answer
The installation program....	<Enter>
Copying files has been finished....	<Enter><Enter>
Congratulation....	<Enter>

- Set boot sequence A:,C: in BIOS. To this end, press DEL key to go to BIOS and set boot sequence in setting menu.
- Remove **AMIQ Preparation Disk** from drive and make normal reinstallation of AMIQ software (see chapter 4).

Replacement of IQ Board

- Switch unit off and disconnect it from AC supply. Screw off rear feet and withdraw casing towards the rear.
- Turn unit and unplug IQ board.
- Unplug LED board, ISA adapter and IEC/IEEE-bus cables as well as cables of I and Q outputs.
- If option AMIQB19 is fitted, remove it and mount it on new IQ board.
- Fit new IQ board and replug all cables.
- Reassemble unit. Take care not to damage any cables.
- Switch unit on. The serial number and options installed should be stored in the EEPROM.
- Trigger calibration: Command `:CAL:ALL?`
- Check reference oscillator: 10 MHz should be measured at reference output.

The following note applies to the removal of a functioning IQ board which is to be used in another unit. In this case, any modifications made to the IQ board by AMIQ must be restored to their original condition prior to removing the board.

Note: *The serial number of AMIQ, the release of options installed (if these are software options) and all calibration data are stored in an EEPROM on the IQ board. Prior to removing the IQ board, the following should be noted:*

- *When an IQ board is fitted, the serial number and option list are transferred to the hard disk. The EEPROM contents must therefore erased prior to removing the IQ board.*
- ***The EEPROM is always erased completely.** For this reason, the calibration data for the reference oscillator must be read out of the EEPROM prior to removal and stored again when the IQ board is re-used.*

1. Saving of calibration data

The command `:CAL:ROSC?` reads the tuning voltage for the reference oscillator from the EEPROM.

Take down this value and enter into the unit when the IQ board is re-used (see point 3).

2. Erasing of EEPROMs

The command `:TEST:EEPRom 0` erases the contents of the EEPROM on the IQ board.

The command causes the first byte of the EEPROM to be overwritten with 0. Since the first byte is part of the checksum on the EEPROM, the EEPROM content thus becomes invalid. In fact, the EEPROM is completely erased in this way. This includes the serial number, the list of options installed and all calibration data.

3. Restoring of calibration data

After erasing the EEPROM and fitting the IQ board into another unit, all calibration data must be restored:

- Write the noted calibration value for the reference oscillator into the EEPROM with the command `:CAL:ROSC`.
- All the other calibration values can be restored with the command `CAL:ALL?` without any further adjustment or measuring equipment needed.

Replacement of Power Supply

- Switch unit off and disconnect it from AC supply. Screw off rear feet and withdraw casing towards the rear.
- Unscrew lateral handles, remove front cover.
- Remove cover of power supply; the front screws are accessible through holes in the front supporting plate.
- Undo connections of power supply and remove power supply (2 screws on the rear, 2 screws at the bottom; if the screws are concealed by options, remove options first).
- Fit new power supply, make the required connections and fit cover.
- Reassemble unit. Take care not to damage any cables.

TEST System

The TEST system provides commands for the self-test and for fault diagnosis. The commands directly access the instrument hardware. The „*TST?“ command calls up a complete selftest performing measurements at all test points available and checking whether the measured values are within the tolerance limit (for a detailed description refer to chapter 6 of the operating manual).

Warning!

The settings listed below bypass the normal safety precautions and may create undesired conditions.

- Normal operating status can be restored by switching the unit off and on again or by *RST.
- *RST has no direct effect on the values set via the TEST system. Rather does *RST reset other AMIQ parameters whose change then affects the values set via the TEST system. Because of this indirect effect, it is not expedient to specify separate *RST values for the setting parameters of the TEST system.

Table 3-1 TEST - Self-Test and Diagnosis

Command	Parameter	Page
:TEST:ABOard:DAC_SKEW_ADJ	0...4095	3.8
:TEST:ABOard:DIFF	0|1	3.8
:TEST:ABOard:I_AMPL_ADJ	0...4095	3.8
:TEST:ABOard:I_AMPL_VAR	0...4095	3.8
:TEST:ABOard:I_AMPL_VAR_EN	0|1	3.8
:TEST:ABOard:I_ATT_SEL	0...3	3.9
:TEST:ABOard:I_Bias	0...4095	3.9
:TEST:ABOard:I_EN	0|1	3.9
:TEST:ABOard:I_EN_INV	0|1	3.9
:TEST:ABOard:I_FILT_SEL	0...3	3.9
:TEST:ABOard:I_OFFSETA_ADJ	0...4095	3.10
:TEST:ABOard:I_OFFSETB_ADJ	0...4095	3.10
:TEST:ABOard:I_OUT_EN	0|1	3.10
:TEST:ABOard:Q_AMPL_ADJ	0...4095	3.10
:TEST:ABOard:Q_AMPL_VAR	0...4095	3.10
:TEST:ABOard:Q_AMPL_VAR_EN	0|1	3.10
:TEST:ABOard:Q_ATT_SEL	0...3	3.10
:TEST:ABOard:Q_Bias	0...4095	3.11
:TEST:ABOard:Q_EN	0|1	3.11
:TEST:ABOard:Q_EN_INV	0|1	3.11

Command	Parameter	Page
:TEST:ABOard:Q_FILT_SEL	0...3	3.11
:TEST:ABOard:Q_OFFSETA_ADJ	0...4095	3.11
:TEST:ABOard:Q_OFFSETB_ADJ	0...4095	3.11
:TEST:ABOard:Q_OUT_EN	0|1	3.12
:TEST:ABOard:VTCXO_TUNE	0...4095	3.12
:TEST:BERTest?		3.12
:TEST:ABOard:I_AMPL_ADJ	0...4095	3.12
:TEST:DIAGnostic:ADCAL	ON|OFF	3.12
:TEST:DIAGnostic:ADCONV	ON|OFF	3.12
:TEST:DIAGnostic:IRELais	ON|OFF	3.13
:TEST:DIAGnostic:QRELais	ON|OFF	3.13
:TEST:DIAGnostic:VALue?		3.13
:TEST:EEPRom	<numeric_value>	3.13
:TEST:LED<n>	ON|OFF	3.13
:TEST:SDR:RUN	–	3.13
:TEST:SDRam:DAC	<i-value>,	3.14
:TEST:SDRam:DATA?	<start>,	3.14
:TEST:SDRam:FILL	<length>	3.14
:TEST:SDRam:AMPL	<level>	3.14
:TEST:SDRam:MODE	SLOW|FAST	3.14
:TEST:SDRam:OFFSet	<offset>	3.14
:TEST:SDRam:PERiod	<samples>	3.15
:TEST:SDRam:PHASe	<samples>	3.15
:TEST:SDRam:WAITpattern	<i-value>,	3.15
:TEST:SDRam:WAVeform	SINE|SQUARe|DC	3.15
:TEST:SYNThesizer:REFerence	0...3	3.15
:TEST:SYNThesizer:PRESCale	0...3	3.15
:TEST:SYNThesizer:DDSClock	0...3	3.16
:TEST:SYNThesizer:DDSFinc	0...	3.16
:TEST:SYNThesizer:SOSelect	0...7	3.16
:TEST:SYNThesizer:N<n>	0...255	3.16
:TEST:SYNThesizer:ROSelect	0|1	3.16

:TEST:ABOard

With the following commands, settings can be made on the analog board. Any settings for this board not included here will be found as regular IEC/IEEE-bus commands in another section. Most of the commands cannot be abbreviated and are therefore given in full length and in capital letters. It is possible to read the results, but not directly from the hardware. Only values stored in the AMIQ software can be read.

:TEST:ABOard:DAC_SKEW_ADJ 0...4095

This command defines the 12-bit D/A converter value for adjusting clock synchronism for the I and Q waveform D/A converters.

Example: `:TEST:ABO:DAC_SKEW_ADJ 2048`

:TEST:ABOard:DIFF 0|1

This command activates the differential outputs provided that option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:DIFF x">` is output. This hardware-related command sets directly the relays required for activating the differential outputs.

0 Asymmetric outputs (signal by-passes the B2-operational amplifiers)

1 Symmetric outputs (all four outputs active)

The internal logic implies that it depends on the I_EN, Q_EN and DIFF settings whether a signal is acually applied to the outputs.

:TEST:ABOard:I_AMPL_ADJ 0...4095

This command is for fine adjustment of the I channel amplitude (variation of reference voltage for I channel D/A converter).

Example: `:TEST:ABO:I_AMPL_ADJ 2048`

:TEST:ABOard:I_AMPL_VAR 0...4095

This command is for entering the electronic level variation for the I channel.

0	(-1)	Maximum negative level
2048	(0)	Minimum level
4095	(+1)	Maximum positive level

Example: `:TEST:ABO:I_AMPL_VAR 2048`

:TEST:ABOard:I_AMPL_VAR_EN 0|1

This command switches the electronic level variation for the I channel on or off.

Example: `:TEST:ABO:I_AMPL_VAR_EN 1`

:TEST:ABOard:I_ATT_SEL 0...3

This command selects the mechanical attenuator for the I channel.

0 = 0 dB

1 = 20 dB

2 = 40 dB

3 = off, relay open

Example: `:TEST:ABO:I_ATT_SEL 1`

:TEST:ABOard:I_Bias 0 ... 4095

This command defines the amplitude of the bias voltage of the I channel. It must be activated only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:I_Bias x">` is output. This command affects the DAC directly. The bias voltage can be set in the range of –2,5 V to +2,5 V.

0 +2,5V

4095 –2,5V

To be able to measure the bias voltage at the outputs, I_EN and DIFF must be set to 1.

:TEST:ABOard:I_EN 0|1

This command switches the I output on or off. It must be used only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:I_EN x">` is generated.

0 I-output is switched off

1 I- output is switched on (if DIFF = 1 at the same time)

:TEST:ABOard:I_EN_INV 0|1

This command controls the output relay K2 of the inverted I output directly. It must be used only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:I_EN_INV x">` is generated.

0 $\overline{I}$ is switched off

1 $\overline{I}$ is switched on

The bias voltage can be measured at the $\overline{I}$ output if it is switched on and the device is set appropriately. The internal logic implies that it depends on the I_EN and DIFF settings whether the inverted I signal is also output.

:TEST:ABOard:I_FILT_SEL 0...3

This command selects the filter for the I channel.

0 = off

1 = filter 1

2 = filter 2

3 = external filter

Example: `:TEST:ABO:I_FILT_SEL 1`

:TEST:ABOard:I_OFFSETA_ADJ 0...4095

This command is for fine adjustment of the I channel offset without electronic attenuator (calibration).

Example: `:TEST:ABO:I_OFFSETA_ADJ 2048`

:TEST:ABOard:I_OFFSETB_ADJ 0...4095

This command is for varying the I channel offset; it compensates the unwanted offset caused by the electronic attenuator.

Example: `:TEST:ABO:I_OFFSETB_ADJ 2048`

:TEST:ABOard:I_OUT_EN 0|1

This command switches the I channel output on (1) or off (0) via a relay.

Example: `:TEST:ABO:I_OUT_EN 1`

:TEST:ABOard:Q_AMPL_ADJ 0...4095

This command is for fine adjustment of the Q channel amplitude (variation of reference voltage of Q channel D/A converter).

Example: `:TEST:ABO:Q_AMPL_ADJ 2048`

:TEST:ABOard:Q_AMPL_VAR 0...4095

This command is for entering the electronic level variation for the Q channel:

0 (-1)	Maximum negative level
2048 (0)	Minimum level
4095 (+1)	Maximum positive level

Example: `:TEST:ABO:Q_AMPL_VAR 2048`

:TEST:ABOard:Q_AMPL_VAR_EN 0|1

This command switches the electronic level variation for the Q channel on or off.

Example: `:TEST:ABOard:Q_AMPL_VAR_EN 0`

:TEST:ABOard:Q_ATT_SEL 0...3

This command selects the mechanical attenuator for the Q channel.

0 = 0 dB
1 = 20 dB
2 = 40 dB
3 = off, relay open

Example: `:TEST:ABO:Q_ATT_SEL 1`

:TEST:ABOard:Q_Bias 0 ... 4095

This command defines the amplitude of the bias voltage of the Q channel. It must be activated only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:Q_Bias x">` is output. This command affects the DAC directly. The bias voltage can be set in the range of –2,5 V to +2,5 V.

0 +2,5V

4095 –2,5V

To be able to measure the bias voltage at the outputs, Q_EN and DIFF must be set to 1.

:TEST:ABOard:Q_EN 0|1

This command switches the Q output on or off. It must be used only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:Q_EN x">` is generated.

0 Q-output is switched off

1 Q- output is switched on (if DIFF = 1 at the same time)

:TEST:ABOard:Q_EN_INV 0|1

This command controls the output relay K2 of the inverted Q output directly. It must be used only if option AMIQ-B2 is fitted. Otherwise the error message `<Error 241, „Necessary option not installed; TEST:ABO:Q_EN_INV x">` is generated.

0 $\overline{Q}$ is switched off

1 $\overline{Q}$ is switched on

The bias voltage can be measured at the $\overline{Q}$ output if it is switched on and the device is set appropriately. The internal logic implies that it depends on the Q_EN and DIFF settings whether the inverted Q signal is also output.

:TEST:ABOard:Q_FILT_SEL 0...3

This command selects the filter for the Q channel.

0 = off

1 = filter 1

2 = filter 2

3 = external filter

Example: `:TEST:ABO:Q_FILT_SEL 1`

:TEST:ABOard:Q_OFFSETA_ADJ 0...4095

This command is for fine adjustment of the Q channel offset without electronic attenuator (calibration).

Example: `:TEST:ABO:Q_OFFSETA_ADJ 2048`

:TEST:ABOard:Q_OFFSETB_ADJ 0...4095

This command is for varying the Q channel offset; it compensates the unwanted offset caused by the electronic attenuator.

Example: `:TEST:ABO:Q_OFFSETB_ADJ 2048`

:TEST:ABOard:Q_OUT_EN 0|1

This command switches the Q channel output on (1) or off (0) via a relay.

Example: `:TEST:ABO:Q_OUT_EN 1`

:TEST:ABOard:VTCXO_TUNE 0...4095

This command defines the 12-bit D/A converter value for tuning the 10 MHz reference oscillator when an internal reference is used.

Example: `:TEST:ABO:VTCXO_TUNE 2048`

:TEST:BERTest

Low-level commands for checking the built-in bit error rate test system.

:TEST:BERTest?

This command is for checking the BER interface at the rear. Before the command is issued, a test adapter (see chapter 1, "BER Interface") must be plugged. If the test is successful, '0' is returned, in case of an error '1'.

Example: `:TEST:BER?`

:TEST:CALibrate

Low-level commands enabling direct access to calibration data.

:TEST:CALibrate:RESet

This command erases all calibration values from the EEPROM and replaces them by internal default values.

IMPORTANT: *All the old values are irrevocably erased by this command and cannot be restored by *RST! The unit must in any case be recalibrated after this command.*

Example: `:TEST:CAL:RES`

:TEST:DIAGnostic

Low-level commands for control of the built-in diagnostic system. At a higher level, this system supplies direct voltage values at various test points with the command :DIAGnostic:TPOint?. The commands given below allow direct control of the diagnostic hardware.

:TEST:DIAGnostic:ADCAL ON|OFF

This command causes the reset or calibration signal line of the diagnostic A/D converter to assume logic 1 or logic 0.

Example: `:TEST:DIAG:ADCAL OFF`

:TEST:DIAGnostic:ADCONV ON|OFF

This command switches the "conversion" bit of the diagnostic A/D converter on or off.

Example: `:TEST:DIAG:ADCONV OFF`

:TEST:DIAGnostic:IRELais ON|OFF

This command switches the diagnostic relay of the I channel on, thus connecting the diagnostic A/D converter to test point 11, 12 or 15.

Note: *The command* `DIAGnostic:TPOINT<n>?` *switches the relay on for <n> = 11, 12 or 15 and switches it off automatically after the measurement; no separate switch-off command is required.*

Example: `:TEST:DIAG:IREL OFF`

:TEST:DIAGnostic:QRELais ON|OFF

This command switches the diagnostic relay of the Q channel on, thus connecting the diagnostic A/D converter to test point 13, 14 or 15.

Note: *The command DIAGnostic:TPOINT<n>? switches the relay on for <n> = 13, 14 or 15. After the measurement, the relay is switched off automatically; no separate switch-off command is required.*

Example: `:TEST:DIAG:QREL ON`

:TEST:DIAGnostic:VALue?

This is a mere query command for reading the instantaneous value (decimal number) at the output of the A/D converter.

IMPORTANT! *No conversion is triggered by this command, nor does the system wait for any ongoing conversion to be completed before the value is read.*

Example: `:TEST:DIAG:VAL?`

:TEST:EEPRom <number>

This command overwrites the first byte of the EEPROM with the specified number. Since the first byte is part of the checksum on the EEPROM, the EEPROM content thus becomes invalid. In fact, the EEPROM is completely erased in this way. This includes the serial number, the list of options installed and all calibration data.

Example: `TEST:EEPR 0`

:TEST:LED<n> ON|OFF

This command switches the specified LED on or off:

- LED0 ON LED,
- LED1 RUNNING LED
- LED2 CONTROL LED

IMPORTANT. *The RUNNING LED is normally hardware-controlled; ie the command* `:TEST:LED1` *switches between hardware control and ON. The RUNNING LED cannot be switched off.*

Example: `:TEST:LED<n> ON`

:TEST:SDR:RUN

This command triggers the output of a calculated curve.

:TEST:SDRam

With the following commands, data can be written to and read from the output memory (SDRAM).

:TEST:SDRam:DAC <i-value>, <q-value>

This command writes the two specified values to the D/A converters of the output memory. The command also sets the voltages at the two output connectors directly to the corresponding values without any action being required by the output memory nor by the software. Any waveform currently being output by the memory is stopped.

The two values must be indicated with 16 bits (the two least significant bits – the marker bits – are ignored). The value 32768 corresponds to a voltage of 0 V.

There is *no* query form of this command.

Example: `:TEST:SDR:DAC 8192, 4000`

:TEST:SDRam:DATA? <start>, <count>

This command reads the specified range from the output memory. The range is output as a list of ASCII characters (alternating I and Q values) with commas as delimiters.

Example: `:TEST:SDR:DATA? 0, 100`

:TEST:SDRam:FILL <length>

This command fills the defined number of points ('length') of the output memory with the waveform defined by `:TEST:SDRam:WAV`. The command also sets the loop pattern.

Example: `:TEST:SDR:FILL 1000`

:TEST:SDRam:AMPL <level>

This command defines the level (measured from the selected offset to the peak). Here, the D/A converter values are to be specified. For example, with an offset of 32768 (0x8000), values between 0 (0x00) and 32767 (0x7FFF) are possible. This setting is ignored for the DC waveform. The sum of offset and amplitude must not exceed 0xFFFF, and the amplitude must not be larger than the offset.

Example: `:TEST:SDR:AMPL 8192`

:TEST:SDRam:MODE SLOW|FAST

This command defines the mode of the output memory. The mode can be queried.

Example: `:TEST:SDR:MODE SLOW`

:TEST:SDRam:OFFSet <offset>

This command defines the DC offset for the desired waveform. This value is added to each sample of the waveform; possible values therefore range from 0 (0x00) to 65535 (0xFFFF). The sum of offset and amplitude must not exceed 0xFFFF, and the amplitude must not be larger than the offset.

Example: `:TEST:SDR:OFFS 32768`

:TEST:SDRam:PERiod <samples>

This command defines the period of the waveform in the output memory in the form of samples (curve points). This value need *not* be integer. For the DC waveform, defining the period makes no sense but it must be defined nevertheless. The period can be queried.

Example: `:TEST:SDR:PER 100.5`

:TEST:SDRam:PHASe <samples>

This command defines the phase between I and Q in the form of samples (curve points). Positive values cause a lag of Q relative to I, negative values cause a lead of Q relative to I. The phase can be queried.

Example: `:TEST:SDR:PHAS 10`

:TEST:SDRam:IDLE <i-value>, <q-value>

This command defines the value to be output by AMIQ while it is waiting for a trigger signal. The permissible range of values is 0 to 2^{16}.

Example: `:TEST:SDR:IDLE 8192, 8192`

:TEST:SDRam:WAVeform SINE|SQUARe|DC

This command defines the waveform to be written to the output memory by means of `TEST:SDRam:FILL`. The sinewave starts on zero crossing. The squarewave starts with a high level.

Example: `:TEST:SDR:WAV SINE`

:TEST:SYNThesizer

This command set enables settings of the clock synthesizer hardware.

:TEST:SYNThesizer:REFerence 0...3

This command defines the reference frequency for the PLL:

0	OFF
1	2.5 MHz
2	5 MHz
3	10 MHz

Example: `:TEST:SYNT:REF 1`

:TEST:SYNThesizer:PREScale 0...3

This command defines the divider between VCO and high clock:

0	corresponds to a divider of	2
1 and 2	correspond to a divider of	4
3	corresponds to a divider of	8

Example: `:TEST:SYNT:PRES 1`

:TEST:SYNThesizer:DDSClock 0...3

This command defines the divider between high clock and DDS clock:

0 OFF,

1 12.5 MHz to 25 MHz

2 25 MHz to 50 MHz

3 50 MHz to 100 MHz

Example: `:TEST:SYNT:DDSC 1`

:TEST:SYNThesizer:DDSFinc 0... (2^32)-1

This command defines the setting value for the DDS.

Example: `:TEST:SYNT:DDSF 8000`

:TEST:SYNThesizer:SOSelect 0...7

The command `:TEST:SYNThesizer:SOSelect` (SOS = synthesizer output select) switches dividers 0 to 6 into the signal path or switches clock generation off (SOSelect 7).

Example: `:TEST:SYNT:SOS 0`

:TEST:SYNThesizer:N<n> 0...255

This command defines the setting values for the divider factors of the "rear" three dividers (<n> = 1, 2, 3). The "front" dividers have a fixed factor of 2.

Example: `:TEST:SYNT:N1 8`

:TEST:SYNThesizer:ROSelect 0|1

The command `TEST:SYNThesizer:ROSelect` (ROS = reference output select) switches the internal 10 MHz VTCXO (1) or the reference input (0) through to the reference output.

Example: `:TEST:SYNT:ROS 1`

4 Firmware Update/Fitting of Options

This chapter provides information on the extension and modification of AMIQ. Here you can file any descriptions and instructions supplied together with a firmware update or subsequently purchased options.

Installation of New AMIQ Software

Insert the update floppy (3.5") into the drive of the unit and switch the unit off and on.

On power-up, the unit checks if an update floppy is inserted. If this is the case, the programs in question are loaded. To this end, the floppy is searched for a file named AMIQxxxx.DAT, with xxxx being the version identification.

Re-Installation of Previous Software

Normally, a firmware update on power-up of AMIQ is performed only if the software to be installed is a later version than the software provided in the unit. If necessary, an older software version can be installed. Proceed as follows:

➢ Rename the file AMIQxxxx.DAT (with xxxx being the version identification) on the installation disk into AMIQFORC.DAT. The software will then be installed even if a later version is provided in AMIQ.

Fitting of Options

The following options are available for AMIQ:

BER Measurements	AMIQ-B1	1110.3500.02
Differential Outputs	AMIQ-B1	1110.3500.02
I/Q Rear-Panel Connection	AMIQB19	1110.3700.02
IS-95 CDMA	AMIQK11	1122.2003.02

On demand, AMIQ is supplied with the options fitted

To install the hardware options AMIQ-B2 and AMIQB19, the instrument must be opened. This will break the calibration seal so that the calibration is no longer valid. Installation should be done by an authorized R&S service representative only. No additional measuring equipment is required.

The following applies to all hardware options:

CAUTION!

Disconnect unit from AC supply before opening the case. Observe safety instructions given at the beginning of this manual.

The unit contains electrostatically sensitive components. The applicable ESD rules for such components must be observed.

- Switch AMIQ off and disconnect power cable.
- Unscrew feet from the rear of the unit (four size 2 Phillips screws).
- Slide casing towards the rear and remove upwards.
- Fit option and refit casing.

CAUTION!

Make sure that cables are neither damaged nor disconnected when putting the casing back in place.

- Switch AMIQ on. If the option includes additional software, install the software in accordance with the instructions given above (see section "Installation of New AMIQ Software") and enable the additional software functions (see installation instructions for the option in question). The software will then detect the new option automatically. If calibration is necessary, this can be performed without external measuring equipment.

Option AMIQ-B1, "BER Measurements"

AMIQ-B1 is a software option which does not require opening of the unit. Install the option in accordance with the instructions enclosed.

Option AMIQ-B2, "Differential Outputs"

To install the option AMIQ-B19, the unit must be opened, and the front panel must be replaced. Install the option in accordance with the instructions enclosed.

Option AMIQB19, "Rear I/Q Outputs"

To install the option AMIQ-B19, the unit must be opened. The option uses marker outputs 3 and 4 for its I and Q outputs so that these outputs cannot be assigned otherwise. Install the option in accordance with the instructions enclosed.

5 Circuit Documents

This chapter contains the circuit documents for the AMIQ basic unit. The circuit documents for the modules "IQ Analog/Digital Unit" (IQ Board) and „Differential Outputs“ are relegated to chapters 6 and 7, respectively. To order replacement parts and modules please contact our *spare parts express service* or your Rohde & Schwarz service representative and note the hints given in the following section, "Module and Cable Exchange".

The address of our *spare parts express service* and a list of Rohde & Schwarz representatives can be found at the beginning of this service manual.

Module and Cable Exchange

Table 5-1 at the end of this section lists all power cables available. The stock numbers necessary for ordering replacement parts and modules can be found in the component lists further down.

Important Note!

When replacing a module please note the safety instructions and the repair instructions given in chapter 3 of this service manual.

Ordering replacement parts

To deliver replacement parts promptly and correctly we need the following indications:

- Stock number (see component lists in this chapter)
- Designation
- Component number according to component list
- Number of pieces
- Instrument type the replacement part belongs to
- Contact person for possible questions

Replaced modules

Replaced modules are an economic alternative for original modules. It should be kept in mind that replaced modules are not new, but repaired and fully tested parts. They may have traces from use but they are electrically and mechanically equivalent to new modules.

To find out which replaced modules are available, please refer to your Rohde & Schwarz representative (or to the central service division, Rohde & Schwarz Munich). The identification number is usually the same as for the original module, but with a variant index .95, .96, .97 or .98.

Ordering and delivery of replaced modules

For ordering replaced modules, the same indications as for ordinary parts are required, however, with the corresponding variant index appended to the stock number.

Taking back defective replacement modules

Defective modules of the replacement program which can be repaired are taken back within **3 months** after delivery of the replaced module. A repurchasing value is credited.

Excluded are parts which can not be repaired, e.g. PCBs that are burnt, broken or damaged by repair attempts, incomplete modules, parts which are heavily damaged mechanically.

The defective parts must be sent back with a **returned accompanying document** containing the following information:

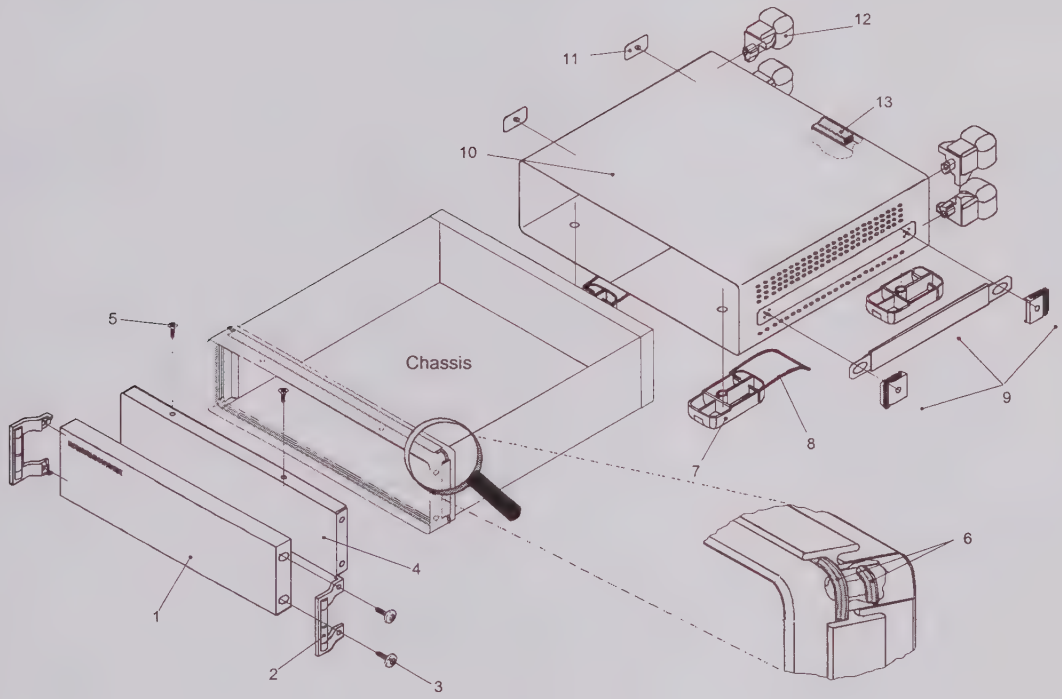
- Stock number, serial number and designation of the dismounted part,
- **Precise** description of the error,
- Stock number, serial number and designation of the instrument the part was dismounted from,
- Date of dismounting,
- Name of the technician who exchanged the part.

A returned accompanying document is provided with each replacement module.

Table 5-1 List of power cables available

Stock No.	Earthed-contact connector	Preferably used in
DS 006.7013	BS1363: 1967' complying with IEC 83: 1975 standard B2	Great Britain
DS 006.7020	Type 12 complying with SEV-regulation 1011.1059, standard sheet S 24 507	Switzerland
DS 006.7036	Type 498/13 complying with US-regulation UL 498, or with IEC 83	USA/Canada
DS 006.7107	Type SAA3 10 A, 250 V, complying with AS C112-1964 Ap.	Australia
DS 0025.2365 DS 0099.1456	DIN 49 441, 10 A, 250 V, angular DIN 49 441, 10 A, 250 V, straight	Europe (except Switzerland)

Construction of the Casing According to Design 2000



The casing essentially consists of a device-specific chassis, the panelling [10], instrument feet [7, 8, 12] and front grips [2].

The device-specific chassis is shown in the center of the figure above. It consists of a front frame and a module support with rear panel. The front frame is made of a bended aluminum profile, the module support is shaped out of a piece of sheet metal.

The front side is completed by a device-specific mounting panel [4] and a front panel [1].

To close the casing, push the panelling over the chassis starting on the rear side of the instrument.

Screw on the panelling by means of the rear-panel feet [12] equipped with elastic buffers.

The lower instrument feet [7, 8] are tightly screwed to the panelling. They prevent the instrument from gliding, in particular if several instruments are piled up.

The contact edges between the different parts of the casing can be sealed by means of the RF seals [6, 13] provided with the instrument.

List of mechanical parts

The AMIQ is constructed in accordance with R&S design 2000.

Size of the casing: 2E 1/1 T450

Overall dimension: 87,6 mm x 465,1 mm x 495 mm

Accessories: 19"-Adapter ZZA-211, Stock no. 1096.3260.00

Current No.	No. of Parts	Designation	Stock No.
1	1	Front panel	1110.2132.00
2	2	Front grip	1096.1468.00
3	4	Screw M4x12	1096.4780.00
4	1	Mounting panel	1110.2161.00
5	4	DIN 965 - M2,5x5 - A4	0852.3608.00
6	m	RF seal O-Prof. 2,0 SI	0396.1035.00
7	4	Instrument foot	1096.2506.00
8	2	Foot	1096.2529.00
9*)	1	Carrying handle, lateral	not available for AMIQ
10	1	Panelling	1096.2229.00
11	4	Cover	1096.2558.00
12	4	Rear-panel foot	1096.2487.00
13	m	RF seal FL 9,53x6,35	1096.4867.00

*) optional

Circuit Documents

The rest of this chapter contains the circuit diagram and part lists for AMIQ basic unit.

- For circuit diagrams, part lists, component plan and XY list for "IQ Analog/Digital Unit" refer to chapter 6.
- For circuit diagrams, part lists, component plan and XY list for "Differential Outputs" refer to chapter 7.

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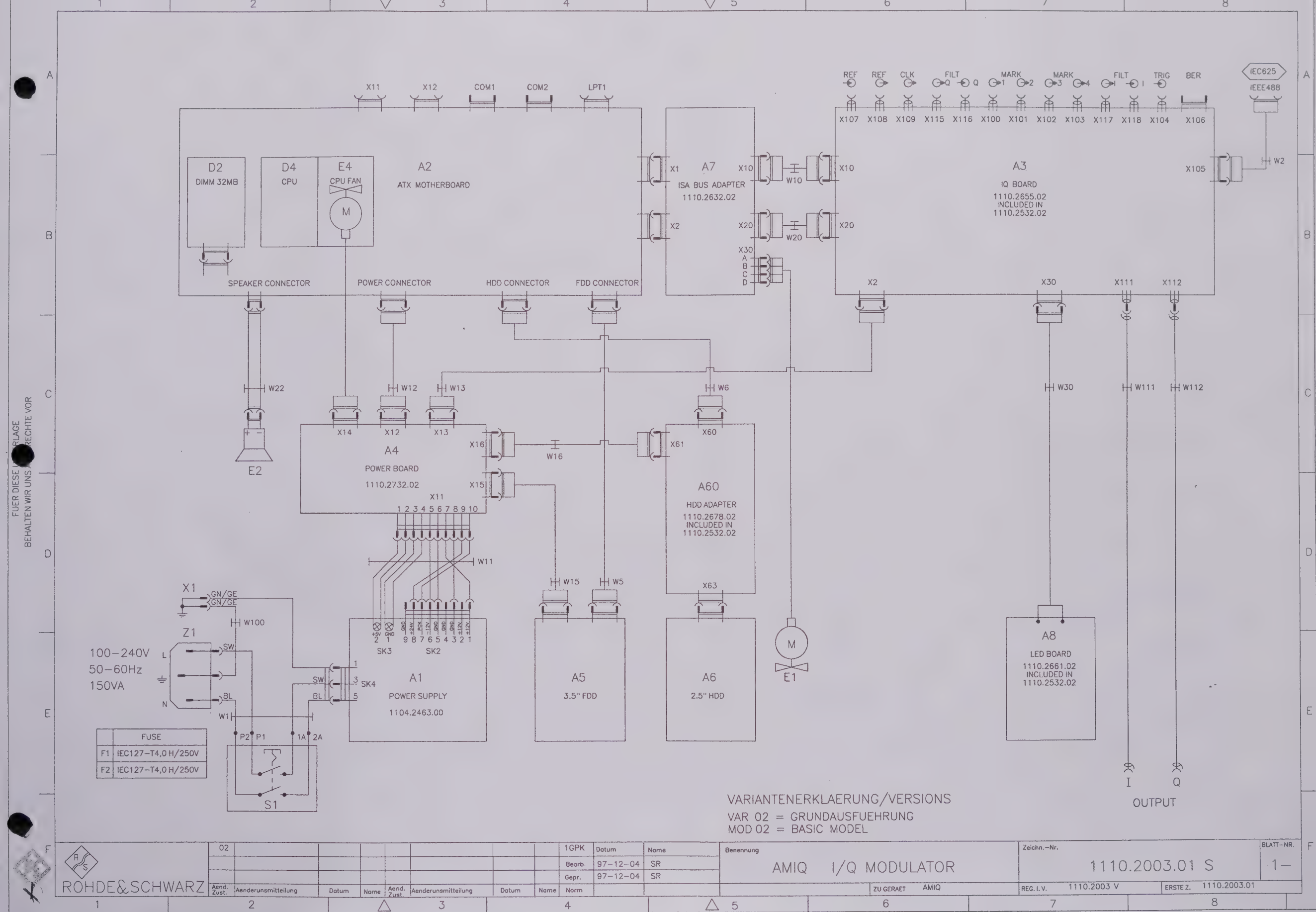
Circuit Diagram

Part List

for AMIQ Basic Unit

1110.2003.02



VARIANTENERKLAERUNG/VERSIONS
VAR 02 = GRUNDAUSFUEHRUNG
MOD 02 = BASIC MODEL

ROHDE&SCHWARZ	02									1GPK	Datum	Name	Benennung	AMIQ I/Q MODULATOR		Zeichn.–Nr.	1110.2003.01 S		BLATT–NR.	1–	
										Bearb.	97–12–04	SR										
										Gepr.	97–12–04	SR										
	Aend. Zust.	Aenderungsmitteilung	Datum	Name	Aend. Zust.	Aenderungsmitteilung	Datum	Name	Norm					ZU GERAET AMIQ		REG. I. V.	1110.2003 V	ERSTE Z.	1110.2003.01			

FUER DIESE UNTERLAGE
BEHALTEN WIR UNS ALLE RECHTE VOR

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUEHRUNG MOD 02 = BASIC MODEL VAR 03 = MODIF.GRUNDAUSF. MOD 03 = MODIF.BASIC MODEL VAR 04 = ERW.WAVEFORM RAM MOD 04 = EXT.WAVEFORM RAM				
..	XX ZUGEH.STROML. CIRC.DIAGR. 1110.2003.01 S				
A1	GJ SCHALTNETZT. 85-264V SWITCHING POWER SUPPLY	1104.2463.00	ASTEC	LPQ154	
A3	ED IQ BOARD IQ BOARD NUR VAR/ONLY MOD: 02 ENTHALTEN IN/INCLUDED IN 1110.2532.02 HIERZU STROML. 1110.2532 S SEE CIRC.DIAGR.1110.2532 S	1110.2655.02			
A3	ED IQ BOARD NUR VAR/ONLY MOD: 03 ENTHALTEN IN/INCLUDED IN 1110.2532.03 HIERZU STROML. 1110.2532 S SEE CIRC.DIAGR.1110.2532 S	1110.2655.03			
A3	ED IQ BOARD NUR VAR/ONLY MOD: 04 ENTHALTEN IN/INCLUDED IN 1110.2532.04 HIERZU STROML. 1110.2532 S SEE CIRC.DIAGR.1110.2532 S	1110.2655.04			
A4	ED POWER BOARD POWER BOARD HIERZU STROML. 1110.2732 S SEE CIRC.DIAGR.1110.2732 S	1110.2732.02			
A5	GM 3,5" FLOPPY DRIVE STD. FLOPPY DRIVE 3.5"	0048.4935.00	TEAC	FD-235HF-A291	
A6	GM 2,5" FESTPL. 1,6GB 2.5" HARDDISK 1.6GB NUR VAR/ONLY MOD: 02 03	0048.5919.00	FUJITSU_LI	M2724TAM	
A6	GM 2,5" FESTPL. 4,32 GB 2.5" HARDDISK 4.32 GB NUR VAR/ONLY MOD: 04	6083.4665.00	IBM_DEUTSC	DKLA 24320	
A7	EE ISA BUS ADAPTER ISA BUS ADAPTER HIERZU STROML. 1110.2632 S SEE CIRC.DIAGR.1110.2632 S	1110.2632.02			
A8	ED LED BOARD LED BOARD ENTHALTEN IN/INCLUDED IN 1110.2532.02/03/04	1110.2661.02			
A60	ED HDD ADAPTER HDD ADAPTER ENTHALTEN IN/INCLUDED IN 1110.2532.02/03/04	1110.2678.02			
D2	BC 32MB DIMM168-MOD.10N IC MEMORY MODULE NUR VAR/ONLY MOD: 02 03	0048.5519.00	MICROSEMIC	MSC864463DT4ESG7CFLG	
D2	BC 864V166D3DT4YDG-8DF IC MEMORY MODULE NUR VAR/ONLY MOD: 04	1110.3222.00			
D4	BC CPU FUER SOCKET 7 SOCKET 7 CPU	1078.3562.00	IDT	C6-PSME180GA	
E1	DX LUEFTEREINHEIT FAN UNIT	1090.3381.00			
E2	EL LAUTSPRECHER0,32 250HM LOUDSPEAKER	0840.6336.00	PHILIPS_CO	WD 01621 Y 25	
E4	GM LUEFTER F. SOCKET 7 FAN FOR SOCKET 7 CPU	1078.3579.00	K&K_MEISTE	1078.3579.00	
F1	SS SCHMELZ.T2,5HIEC127-2V FUSE	SS 0020.7575.00	WICKMANN	T2.5 H NR.19181	
F2	SS SCHMELZ.T2,5HIEC127-2V FUSE	SS 0020.7575.00	WICKMANN	T2.5 H NR.19181	

Für diese Unterlage behalten wir uns alle Rechte vor.

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
S1	SB NETZSCHALTER 2XA O.KN. POWER-SWITCH	SB 1030.8387.00	SCHADOW	100100-7043	
W1	DX PRIMAER POWER CABLE	1110.2884.00			
W2	DY IEC-BUS KABEL W2 IEC BUS CABLE W2	1080.9758.00			
W5	XX BEMERKUNG PLEASE NOTE FDD DATA CABLE ENTHALTEN IN/INCLUDED IN A2				
W6	XX BEMERKUNG PLEASE NOTE HDD DATA CABLE ENTHALTEN IN/INCLUDED IN A2				
W10	DY AT ADAPTER CABLE	1110.2832.00			
W11	DX SECONDARY POWER CABLE	1110.2890.00			
W12	DX ATX POWER CABLE	1110.2949.00			
W13	DX IQ POWER CABLE	1110.2903.00			
W15	DX FDD POWER CABLE	1078.3027.00			
W16	DX HDD POWER CABLE	1110.2926.00			
W20	DY AT ADAPTER CABLE	1110.2832.00			
W22	DX SPEAKER CABLE	1110.2955.00			
W100	DX SCHUTZLEITERKABEL PE CABLE	1090.3881.00			
W111	DV FRONT OUTPUT CABLE	1110.2932.00			
W112	DV FRONT OUTPUT CABLE	1110.2932.00			
X1	FV FLACHSTECKER GR 6,3 CONNECTOR	FV 0543.6705.00	AMP	141878-2	
Z1	FN NETZFILTER M.2SICH.+ST POWER FILTER	1026.3426.00	CORCOM	F-7385D	

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Circuit Documents

for Module

IQ Analog/Digital Unit

1110.2532.02

from AT/ATX BOARD

AT-BUS DATA

AT-BUS ADRESS

0/X20

IEC625 IEEE488

X105

IEC BUS CONTROLLER

40 MHz

G2 100 MHz

EEPROM

D7 ADDRESS GENERATOR

24

6

D2 CONTROLLER

ANALOG SETUP

RIGIN

DIG_CLK_1

SINGLE_CLK

DIG_CLK_2

SYN_OUT_CLK

SINGLE_CLK

DIG_CLK_1

DIG_CLK_2

SINGLE_CLK

SLOW

FAST

SRCLK

DAC_CLK

MARKER_CLK

BER_CLK

READDQ

WRITEDQ

LATCH

DQ-BUS

LATCH

LDQ-BUS

16

SRADR-BUS

CRTL

SRMUX

SDRAM

SDRAM

DQ-BUS

DI-BUS

4

4

LATCH

QDATA

TRIGOUT

IDATA

SRSTROBE

ENAWR

WRITEDI

LATCH

DI-BUS

LATCH

LDI-BUS

SRCLK5

SRCLK1

SRCLK2

SRCLK3

SRCLK4

SRCLK5

SRCLK6

READDI

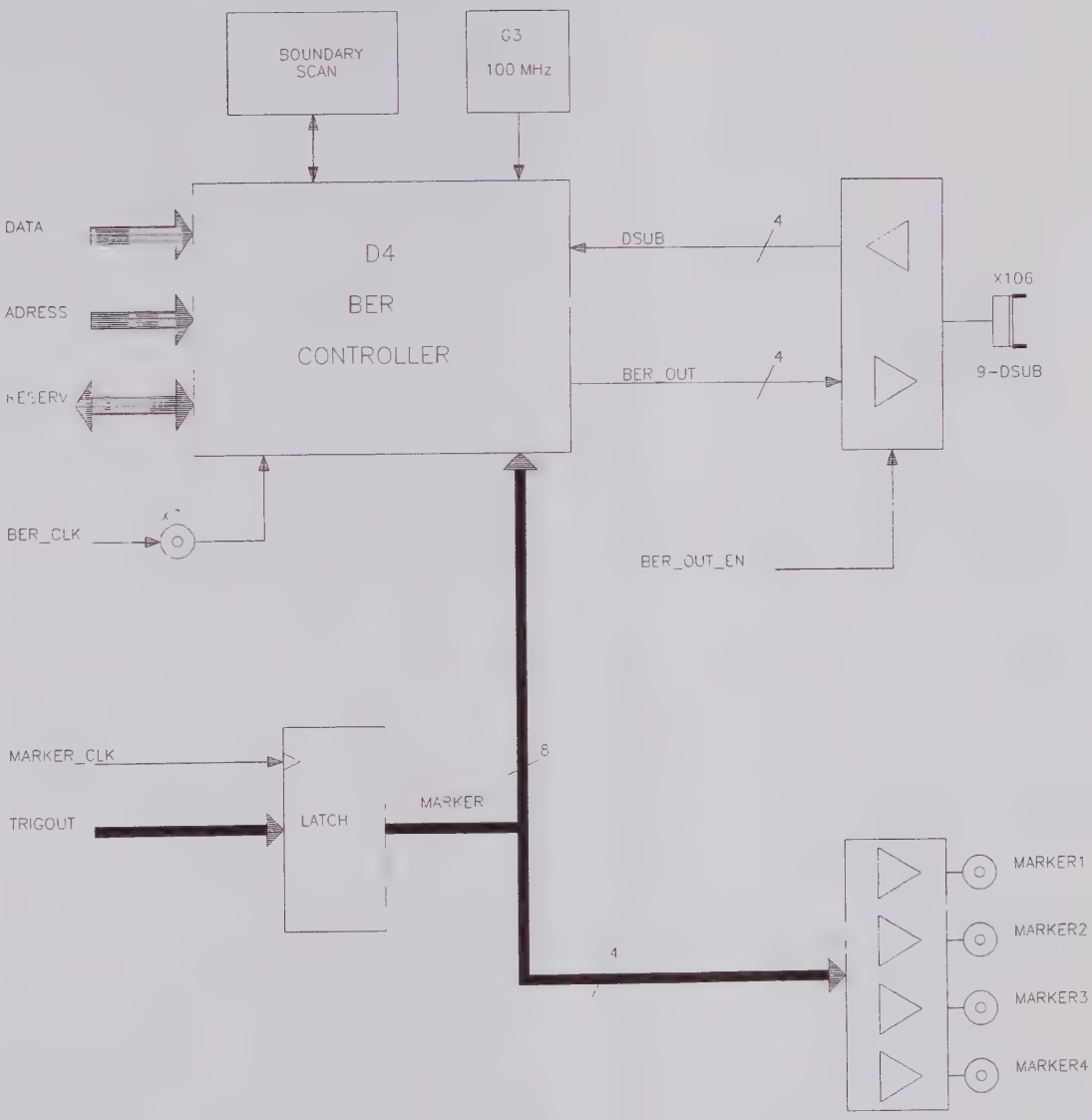
SRCLK

16

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

BLOCK DIAGRAM DIGITAL UNIT

05.06				1GPK	DATUM	NAME	BENENNUNG	
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT	
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT	
				NORM			TOP/TOP.1	
				PLOTT	98-10-16	SCHWAIGE		
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S	BLATT-NR. 1 +
				ZU GERAET AMIQ			REG.I.V. 1110.2003	ERSTE Z. 1110.2003.01



BEHALTEN WIR UNS ... RECHTE VOR

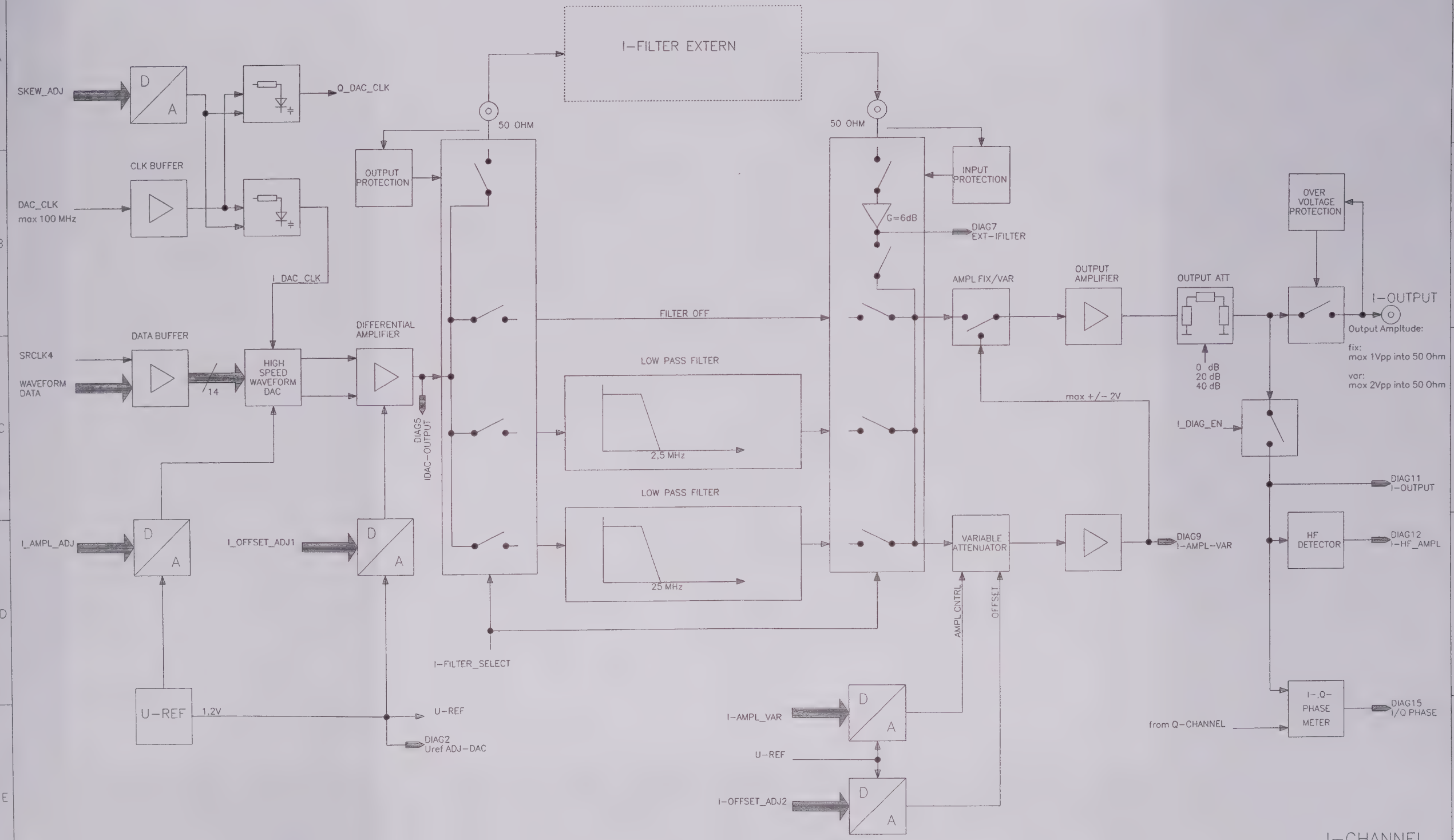
ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

BLOCK DIAGRAM BER UNIT

05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/TOP.2
				PLOTT	98-10-16	SCHWAIGE	
				ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
AEND. IND	AENDERUNGS-MITTEILUNG	DATUM	NAME	ZU GERAET AMIQ			REG. V 1110.2003 ERSTELL 1110.2003.01

BLATT-NR 2 +

2 3 4



ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

1GPK	DATUM	NAME
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

ROHDE&SCHWARZ

ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/TOP.3

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR. 3 +

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

Q-FILTER EXTERN

50 OHM

OUTPUT PROTECTION

50 OHM

INPUT PROTECTION

G=6dB

DIAG8
EXT-QFILTER

Q_DAC_CLK

DATA BUFFER

SRCLK3

WAVEFORM DATA

14

HIGH SPEED WAVEFORM DAC

DIFFERENTIAL AMPLIFIER

DIAG6
QDAC-OUTPUT

FILTER OFF

LOW PASS FILTER

2,5 MHz

LOW PASS FILTER

25 MHz

AMPL FIX/VAR

OUTPUT AMPLIFIER

OUTPUT ATT

0 dB
20 dB
40 dB

OVER VOLTAGE PROTECTION

Q-OUTPUT

Output Amplitude:

fix:
max 1Vpp into 50 Ohm

var:
max 2Vpp into 50 Ohm

max +/- 2V

Q_DIAG_EN

DIAG13
Q-AMPL

Q_AMPL_ADJ

D/A

U-REF

Q_OFFSET_ADJ1

D/A

U-REF

Q-FILTER_SELECT

VARIABLE ATTENUATOR

AMPL CNTRL

OFFSET

DIAG10
Q-AMPL-VAR

HF DETECTOR

DIAG14
Q-HF AMPL

to Phase Meter

DIAG1

2,5V

A/D REF

DIAG0

DIAG15

MUX

A/D

DIAGNOSE DATA

CLOCK

DIAG-MEASUREMENT SELECT

Q-AMPL_VAR

D/A

U-REF

Q-OFFSET_ADJ2

D/A

Q-CHANNEL

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.07			

1GPK	DATUM	NAME
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	99-02-01	SCHWAIGE

ROHDE&SCHWARZ

ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/TOP.4

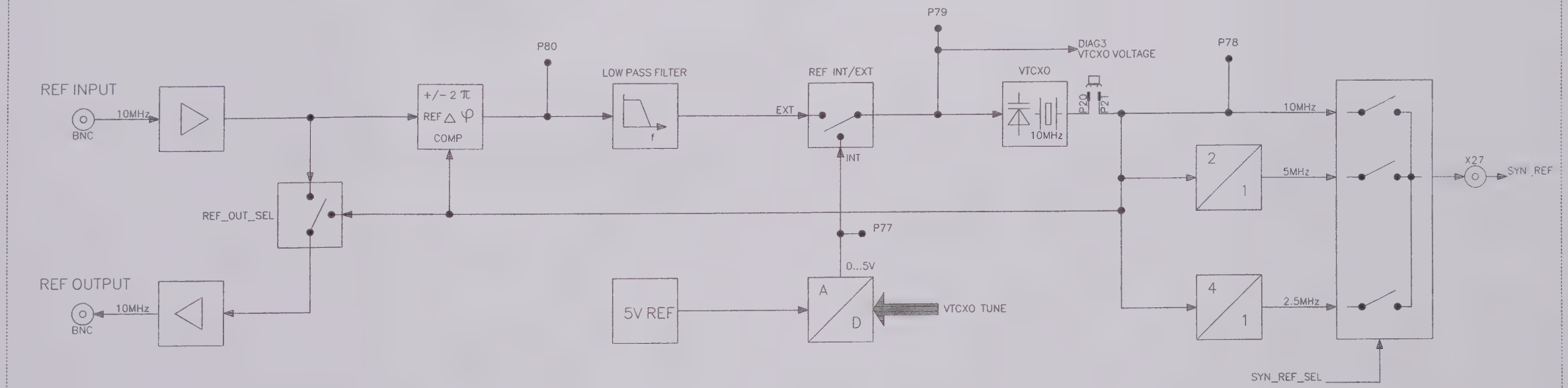
ZEICHN.-NR. 1110.2532.01 S

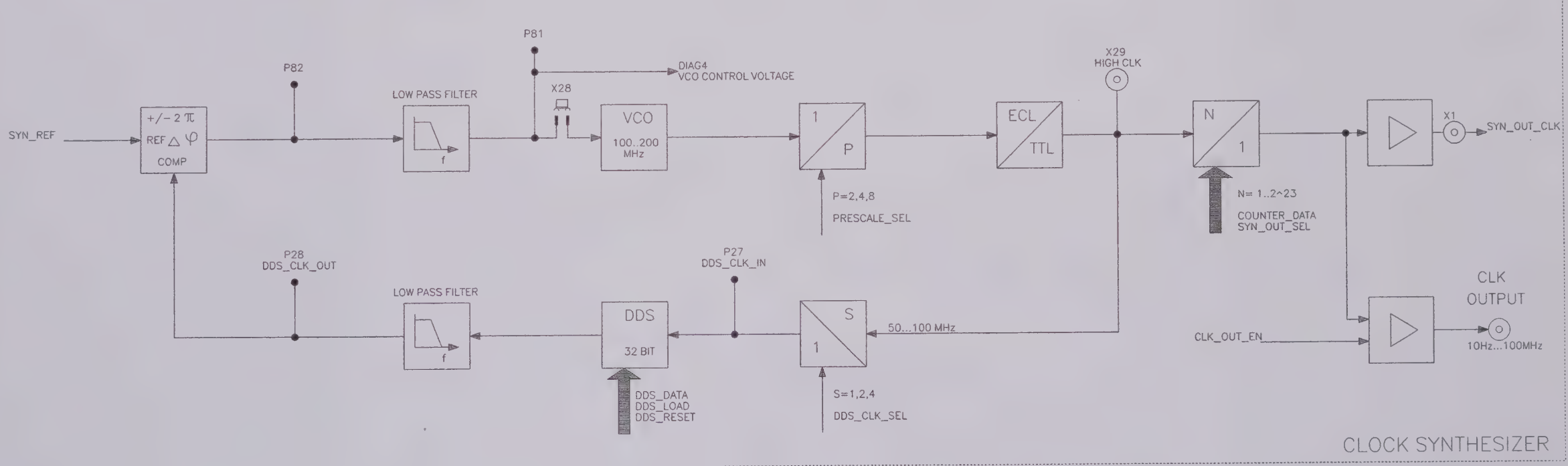
BLATT-NR 4

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

BEHALTEN WIR UNS ALLE RECHTE VOR





ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

	DATUM	NAME
1GPK		
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/TOP.5

ROHDE&SCHWARZ

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR 5 +

ZU GERAET AMIQ | REG.I.V. 1110.2003 | ERSTE Z. 1110.2003.01

TRIGGER INPUT

X104

X107 X108 X109 X115 X116 X117 X118

DIGITAL UNIT

TRIGOUT
QDATA
IDATA
IAIDI
IAIDO
IAIRD
IAIWR
IAICLK
IGIDI
IGIDO
IGIRD
IGIWR
IGICLK
WREN
SRCLK3
SRCLK4
DIVRES
RESETDRV
RESERV
DATA
ADRESS
I_DAC_CLK
Q_DAC_CLK
MARKER_CLK
BER_CLK
IOW
IOR
IOCS16
DIGRESET
IRQ10
IRQ11
AEN
REFRESH
BSCAN

TRIGIN
SYN_OUT_CLK (6/7B,10/1A,22/8A)
SKEW_TUNE (6/7C,10/6C,21/3D)

DIGITAL_UNIT_4 BLATT 7,8,9,10,11

ANALOG UNIT

QDATA
IDATA
IAIDI
IAIDO
IAIRD
IAIWR
IAICLK
IGIDI
IGIDO
IGIRD
IGIWR
IGICLK
WREN
SRCLK3
SRCLK4
DIVRES
RESETDRV
RESERV
PROG
I_DAC_CLK
Q_DAC_CLK

ANALOG_UNIT_5
BLATT 12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,29

REFIN
REFOUT
CLKOUT
Q_FILT_EXT_OUT
Q_FILT_EXT_IN
I_FILT_EXT_OUT
I_FILT_EXT_IN
SYN_OUT_CLK → SYN_OUT_CLK (6/10,10/1A,22/8A)
SKEW_TUNE → SKEW_TUNE (6/10,10/6C,21/30)
I_OUTPUT
Q_OUTPUT

BER UNIT

PROG
TRIGOUT
RESERV
DATA
ADRESS
MARKER_CLK
BER_CLK
IOW
IOR
IOCS16
DIGRESET
IRQ10
IRQ11
AEN
REFRESH
BSCAN

BER_UNIT_6 BLATT 28

X112 X111

Q I

FROM POWER SUPPLY

X2 7 L83 625R(Z) → +24VA
C296 100U 35V, C95 10N, C96 10N, C177 10N

X2 6 L84 625R(Z) → +12VA
C584 10U 25V, C179 33N, C182 33N

X2 4 L85 625R(Z) → -12VA
C582 10U 25V, C180 33N, C181 33N

X2 3 L86 625R(Z) → +5VA
C583 100U 20V, C382 100N

X2 1 L81 625R(Z) → +5V
X2 2, X2 5, X2 8, X2 9, X2 10

N1 LT1084CP → +3.3V
C380 100N, C664 100U 20V, C56 100U 20V, C1 1U, R49 200, C57 100U 25V, C58 22U 35V, R62 330

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

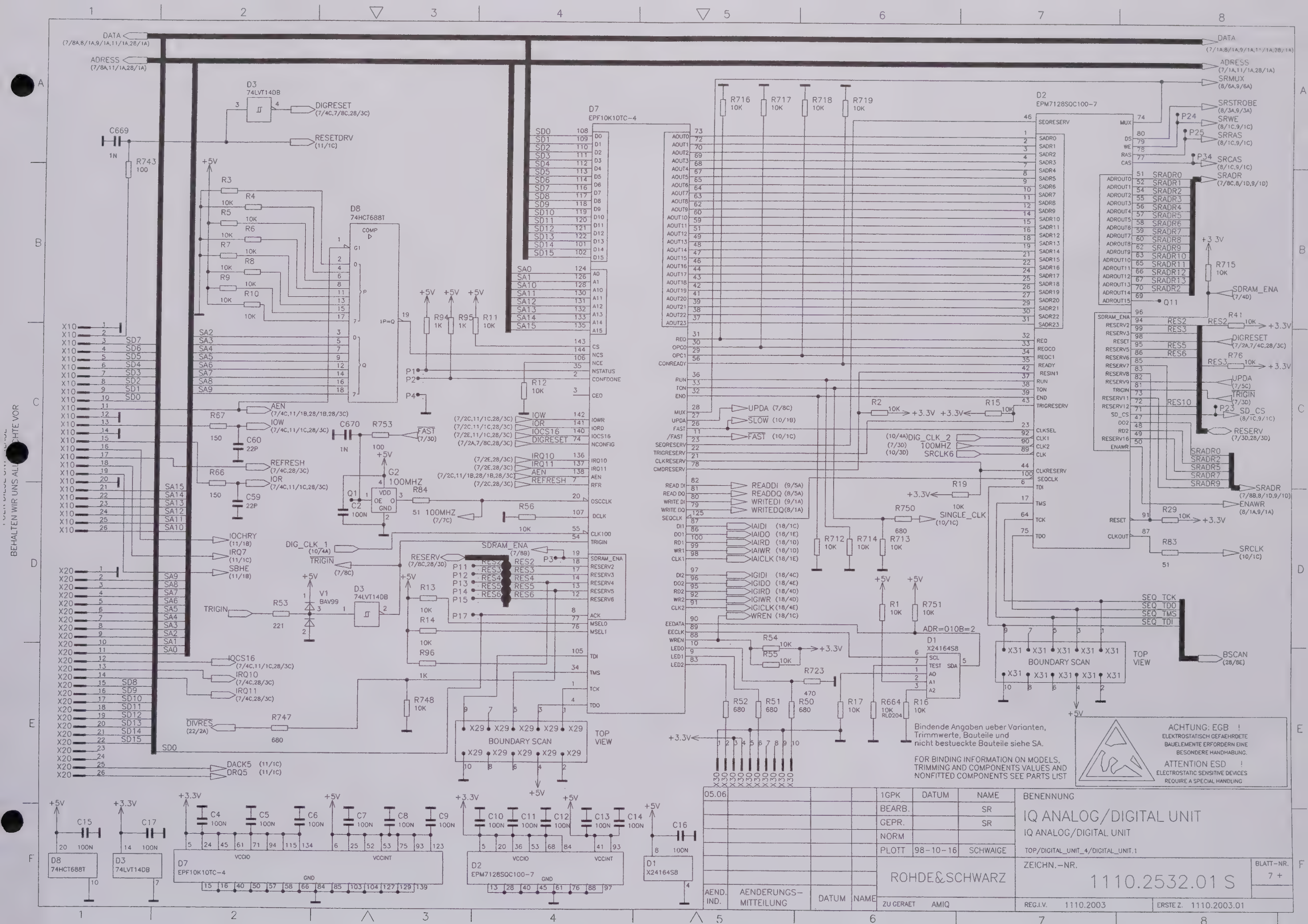
ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

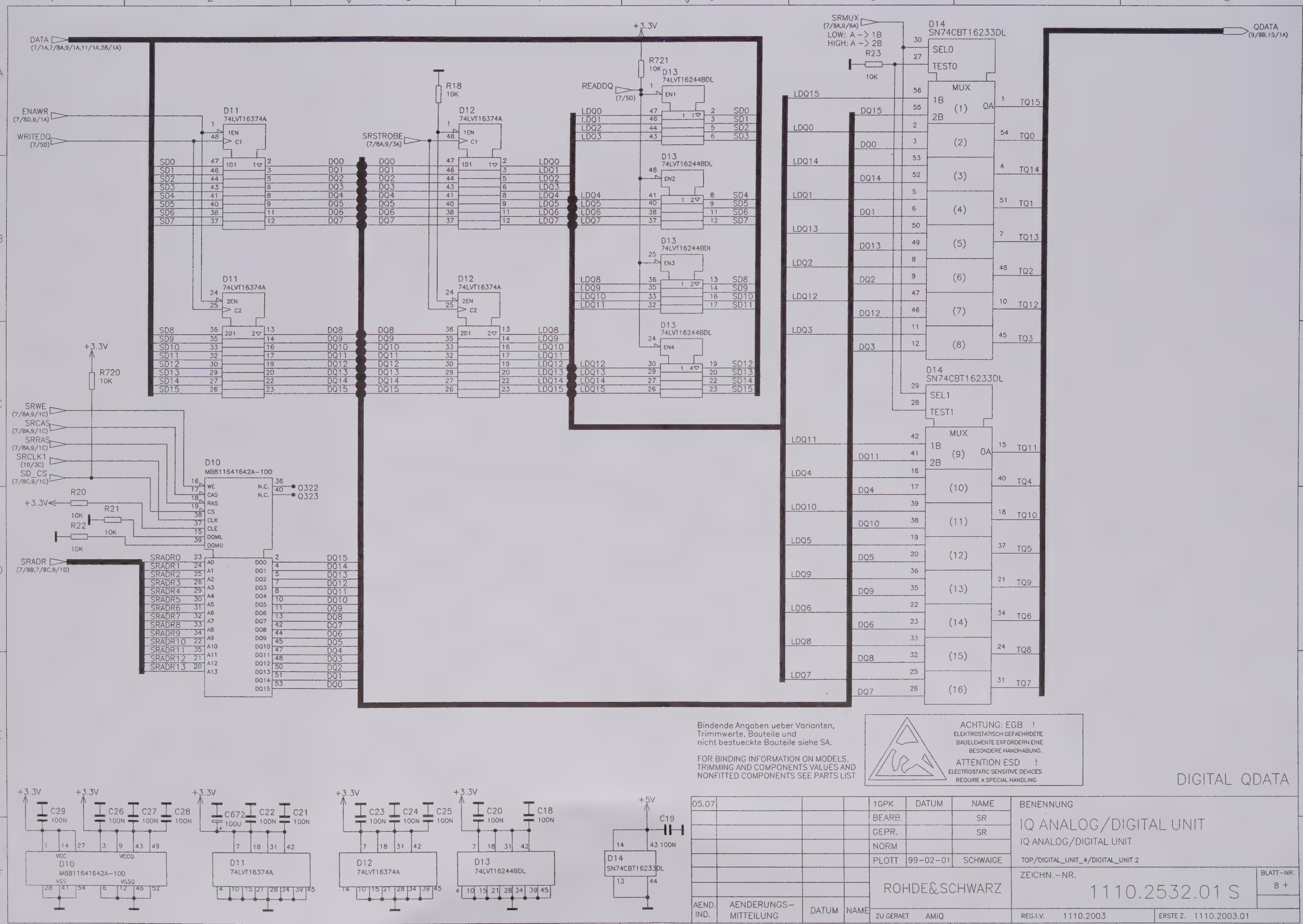
POWER SUPPLY INPUT , SIGNAL CONNECTORS

05.07				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/TOP.6
				PLOTT	99-02-01	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR. 6 +

BEHALTEN WIR UNS AL... HTE VOR


DATA (7/8A,8/1A,9/1A,11/1A,28/1A)
ADRESS (7/8A,11/1A,28/1A)
D3 74LVT14DB
DIGRESET (7/4C,7/8C,28/3C)
RESETDRV (11/1C)
C669 1N
R743 100
+5V
R3 R4 R5 R6 R7 R8 R9 R10 10K
D8 74HCT688T
COMP
P Q
1P=Q
SA2 SA3 SA4 SA5 SA6 SA7 SA8 SA9
X10 SD7 SD6 SD5 SD4 SD3 SD2 SD1 SD0
AEN (7/4C,11/1B,28/1B,28/3C)
R67 150
IOW (7/4C,11/1C,28/3C)
C60 22P
REFRESH (7/4C,28/3C)
R66 150
IOR (7/4C,11/1C,28/3C)
C59 22P
C670 1N
R753 100
FAST (7/30)
G2 100MHZ
Q1 C2 100N
R84 51
100MHZ (7/7C)
R56 10K
DIG_CLK_1 (10/4A)
TRIGIN (7/8C)
V1 BAV99
R53 221
D3 74LVT14DB
SDRAM_ENA (7/8B)
RESERV (7/8C,28/3D)
P11 P12 P13 P14 P15 P17
RES2 RES3 RES4 RES5 RES6
R13 R14 R96 10K 1K
R748 10K
R747 680
DIVRES (22/2A)
SA15 SA14 SA13 SA12 SA11 SA10
SA9 SA8 SA7 SA6 SA5 SA4 SA3 SA2 SA1 SA0
X20 SD8 SD9 SD10 SD11 SD12 SD13 SD14 SD15
IOCHRY (11/1B)
IRQ7 (11/1C)
SBHE (11/1B)
IOCS16 (7/4C,11/1C,28/3C)
IRQ10 (7/4C,28/3C)
IRQ11 (7/4C,28/3C)
DACK5 (11/1C)
DRQ5 (11/1C)
SD0
D7 EPF10K10TC-4
SD0 SD1 SD2 SD3 SD4 SD5 SD6 SD7 SD8 SD9 SD10 SD11 SD12 SD13 SD14 SD15
SA0 SA1 SA10 SA11 SA12 SA13 SA14 SA15
CS NCS NCE NSTATUS CONFDONE CEO
IOWR IORD IOCS16 NCONFIG
IRQ10 IRQ11 AEN RFR
OSCCLK DCLK CLK100 TRIGIN
SDRAM_ENA RESERV2 RESERV3 RESERV4 RESERV5 RESERV6
ACK MSEL0 MSEL1
TDI TMS TCK TDO
R12 10K
P1 P2 P4
+5V +5V +5V
R94 1K R95 1K R11 10K
X29 X29 X29 X29 X29 X29 X29 X29 X29 X29
BOUNDARY SCAN
TOP VIEW
AOUT0 AOUT1 AOUT2 AOUT3 AOUT4 AOUT5 AOUT6 AOUT7 AOUT8 AOUT9 AOUT10 AOUT11 AOUT12 AOUT13 AOUT14 AOUT15 AOUT16 AOUT17 AOUT18 AOUT19 AOUT20 AOUT21 AOUT22 AOUT23
REQ OPC0 OPC1 CONREADY
RUN TON END
MUX UPDA FAST /FAST SEQRESERV TRIGRESERV CLKRESERV CMDRESERV
READ DI READ DQ WRITE DI WRITE DQ SEQCLK
DI1 DO1 RD1 WR1 CLK1
DI2 DO2 RD2 WR2 CLK2
EEDATA EECLK WREN LED0 LED1 LED2
R716 R717 R718 R719 10K
UPDA (7/8C)
SLOW (10/1B)
FAST (10/1C)
READDI (9/5A)
READDQ (8/5A)
WRITEDI (9/1A)
WRITEDQ(8/1A)
IAIDI (18/1C)
IAIDO (18/1E)
IAIRD (18/1D)
IAIWR (18/1D)
IAICLK (18/1E)
IGIDI (18/4C)
IGIDO (18/4E)
IGIRD (18/4D)
IGIWR (18/4D)
IGICLK (18/4E)
WREN (18/1C)
R712 R714 R713 10K
R750 680
SINGLE_CLK (10/1C)
R1 R751 10K
R54 R55 10K
+3.3V
R723 470
R52 R51 R50 680
R17 R664 R16 10K
RL0204
ADR=010B=2
D1 X24164S8
SCL TEST SDA A0 A1 A2
Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.
FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST
D2 EPM7128SQC100-7
SEQRESERV SADR0 SADR1 SADR2 SADR3 SADR4 SADR5 SADR6 SADR7 SADR8 SADR9 SADR10 SADR11 SADR12 SADR13 SADR14 SADR15 SADR16 SADR17 SADR18 SADR19 SADR20 SADR21 SADR22 SADR23
REQ REQCO REQC1 READY RESIN1 RUN TON END TRIGRESERV
CLKSEL CLK1 CLK2 CLK CLKRESERV SEQCLK TDI TMS TCK TDO
R2 R15 10K +3.3V
(10/4A)DIG_CLK_2 (7/30) 100MHZ (10/30) SRCLK6
R19 10K +3.3V
MUX DS WE RAS CAS RESET CLKOUT
P24 P25 P34
SRMUX (8/6A,9/6A)
SRSTROBE (8/3A,9/3A)
SRWE (8/1C,9/1C)
SRRAS (8/1C,9/1C)
SRCAS (8/1C,9/1C)
SRADR (7/8C,8/1D,9/1D)
ADROUT0 ADROUT1 ADROUT2 ADROUT3 ADROUT4 ADROUT5 ADROUT6 ADROUT7 ADROUT8 ADROUT9 ADROUT10 ADROUT11 ADROUT12 ADROUT13 ADROUT14 ADROUT15
SRADR0 SRADR1 SRADR2 SRADR3 SRADR4 SRADR5 SRADR6 SRADR7 SRADR8 SRADR9 SRADR10 SRADR11 SRADR12 SRADR13 SRADR2
Q11
+3.3V
R715 10K
SDRAM_ENA (7/40)
SDRAM_ENA RESERV2 RESERV3 RESET RESERV5 RESERV6 RESERV7 RESERV8 RESERV9 TRIGIN RESERV11 RESERV12 SD_CS DD2 RD2 RESERV16 ENAWR
R41 R76 10K +3.3V
RES2 RES3 RES5 RES6 RES10
DIGRESET (7/2A,7/4C,28/3C)
UPDA (7/5C)
TRIGIN (7/30)
P23 SD_CS (8/1C,9/1C)
RESERV (7/3D,28/3D)
SRADR0 SRADR2 SRADR5 SRADR7 SRADR9
SRADR (7/8B,8/1D,9/1D)
ENAWR (8/1A,9/1A)
R29 10K +3.3V
R83 51
SRCLK (10/1C)
SEQ_TCK SEQ_TDO SEQ_TMS SEQ_TDI
X31 X31 X31 X31 X31 X31 X31 X31 X31 X31
BOUNDARY SCAN
TOP VIEW
BSCAN (28/8E)
+5V
ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING
C15 C17 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C16 100N
+3.3V
VCCIO VCCINT GND
D8 74HCT688T
D3 74LVT14DB
D7 EPF10K10TC-4
D2 EPM7128SQC100-7
D1 X24164S8
05.06
AEND. IND.
AENDERUNGS-MITTEILUNG
DATUM NAME
1GPK DATUM NAME
BEARB. SR
GEPR. SR
NORM
PLOTT 98-10-16 SCHWAIGE
ROHDE&SCHWARZ
ZU GERAET AMIQ
BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/DIGITAL_UNIT_4/DIGITAL_UNIT.1
ZEICHN.-NR.
1110.2532.01 S
BLATT-NR. 7 +
REG.I.V. 1110.2003
ERSTE Z. 1110.2003.01
BEHALTEN WIR UNS ALLE RECHTE VOR


DATA (7/1A,7/8A,9/1A,11/1A,28/1A)
ENAWR (7/8D,9/1A)
WRITEDQ (7/5D)
SRSTROBE (7/8A,9/3A)
READDQ (7/5D)
+3.3V
R721 10K
R18 10K
D11 74LVT16374A
D12 74LVT16374A
D13 74LVT16244BDL
SD0 SD1 SD2 SD3 SD4 SD5 SD6 SD7
SD8 SD9 SD10 SD11 SD12 SD13 SD14 SD15
LDQ0 LDQ1 LDQ2 LDQ3 LDQ4 LDQ5 LDQ6 LDQ7
LDQ8 LDQ9 LDQ10 LDQ11 LDQ12 LDQ13 LDQ14 LDQ15
DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7
DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15
SRMUX (7/8A,9/6A)
LOW: A -> 1B
HIGH: A -> 2B
R23 10K
D14 SN74CBT16233DL
SEL0 TEST0 SEL1 TEST1
MUX 1B 2B (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) 0A
TQ15 TQ0 TQ14 TQ1 TQ13 TQ2 TQ12 TQ3 TQ11 TQ4 TQ10 TQ5 TQ9 TQ6 TQ8 TQ7
QDATA (9/8B,15/1A)
+3.3V
R720 10K
SRWE (7/8A,9/1C)
SRCAS (7/8A,9/1C)
SRRAS (7/8A,9/1C)
SRCLK1 (10/3C)
SD_CS (7/8C,9/1C)
R20 10K
R21 10K
R22 10K
D10 MB811641642A-100
WE CAS RAS CS CLK CLE DOML DOMU
N.C. N.C.
Q322
Q323
SRADR (7/8B,7/8C,9/1D)
SRADR0 SRADR1 SRADR2 SRADR3 SRADR4 SRADR5 SRADR6 SRADR7 SRADR8 SRADR9 SRADR10 SRADR11 SRADR12 SRADR13
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13
DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15
DQ15 DQ14 DQ13 DQ12 DQ11 DQ10 DQ09 DQ08 DQ07 DQ06 DQ05 DQ04 DQ03 DQ02 DQ01 DQ00
C29 C26 C27 C28 C672 C22 C21 C23 C24 C25 C20 C18 C19
100N 100U
VCC VCCQ VSS VSSQ
D10 MB811641642A-100
D11 74LVT16374A
D12 74LVT16374A
D13 74LVT16244BDL
D14 SN74CBT16233DL
+5V
FUER DIESE UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

DIGITAL QDATA

05.07				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/DIGITAL_UNIT_4/DIGITAL_UNIT.2
				PLOTT	99-02-01	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMiQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR. 8 +

BEHALTEN WIR UNS ALLE RECHTE VOR

DATA (7/1A,7/8A,8/1A,11/1A,28/1A)

ENAWR (7/80,8/1A)

WRITEDI (7/5D)

+3.3V

R722 10K

READDI (7/5C)

R25 10K

SRSTROBE (7/8A,8/3A)

D21 74LVT16374A

D22 74LVT16374A

D23 74LVT16244BDL

SD0 SD1 SD2 SD3 SD4 SD5 SD6 SD7 SD8 SD9 SD10 SD11 SD12 SD13 SD14 SD15

DI0 DI1 DI2 DI3 DI4 DI5 DI6 DI7 DI8 DI9 DI10 DI11 DI12 DI13 DI14 DI15

LDI0 LDI1 LDI2 LDI3 LDI4 LDI5 LDI6 LDI7 LDI8 LDI9 LDI10 LDI11 LDI12 LDI13 LDI14 LDI15

SRMUX (7/8A,8/6A)
LOW: A -> 1B
HIGH: A -> 2B

R24 10K

D24 SN74CBT16233DL

SEL0 TEST0 SEL1 TEST1

MUX 1B 2B (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) 0A

TI15 TI0 TI14 TI1 TI13 TI2 TI12 TI3 TI11 TI4 TI10 TI5 TI9 TI6 TI8 TI7

IDATA (12/1A)

SRCLK5 (10/30)

ODATA (8/8A,15/1A)

R72 10K

D26 74LVT574DB

TQ0 TQ1 TQ2 TQ3 TI0 TI1 TI2 TI3

19 TRIGOUT2
18 TRIGOUT3
17 TRIGOUT6
16 TRIGOUT7
15 TRIGOUT10
14 TRIGOUT1
13 TRIGOUT4
12 TRIGOUT5

TRIGOUT (28/8C)

SRWE (7/8A,8/1C)
SRCAS (7/8A,8/1C)
SRRAS (7/8A,8/1C)
SRCLK2 (10/3E)
SD_CS (7/8C,8/1C)

D20 MB811641642A-100

WE CAS RAS CS CLK CLE DOML DOMU

N.C. Q324 N.C. Q325

R28 10K
R27 10K
R26 10K
+3.3V

SRADR (7/8B,7/8C,8/1D)

SRADR0 SRADR1 SRADR2 SRADR3 SRADR4 SRADR5 SRADR6 SRADR7 SRADR8 SRADR9 SRADR10 SRADR11 SRADR12 SRADR13

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13

DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15

DI15 DI14 DI13 DI12 DI11 DI10 DI9 DI8 DI7 DI6 DI5 DI4 DI3 DI2 DI1 DI0

C40 C41 C42 C43 C35 C34 C33 C32 C31 C36 C38 C61 C37 100N

D20 MB811641642A-100 VCC VCCQ VSS VSSQ

D21 74LVT16374A

D22 74LVT16374A

D23 74LVT16244BDL

D26 74LVT574DB

D24 SN74CBT16233DL

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

DIGITAL IDATA

05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/DIGITAL_UNIT_4/DIGITAL_UNIT.3
				PLOTT	98-10-16	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S BLATT-NR. 9 +
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

CLOCK DISTRIBUTION

SYN_OUT_CLK (6/10,6/7B,22/8A)
SLOW (7/5C)
FAST (7/5C)
SRCLK (7/8D,10/1C)
SINGLE_CLK (7/6D)
DAC_CLK
SKEW_TUNE (6/10,6/7C,21/3D)

DIG_CLK_1 (7/3D)
DIG_CLK_2 (7/7C)
P16
MARKER_CLK (28/5B)
BER_CLK (28/3D)
I_DAC_CLK (12/1B)
Q_DAC_CLK (15/1B)

SRCLK1 (8/1C) to SDRAM Q
SRCLK5 (9/7B) to TRIGGER OUT LATCH
SRCLK3 (15/1A,15/1C) to DATA LATCH Q
SRCLK4 (12/1A,12/1C) to DATA LATCH I
SRCLK6 (7/7C) to CONTROLLER
SRCLK2 (9/1C) to SDRAM I

SKEW ADJ

** = NOT FITTED

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestuecke Bauteile siehe SA.

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ATTENTION ESD !
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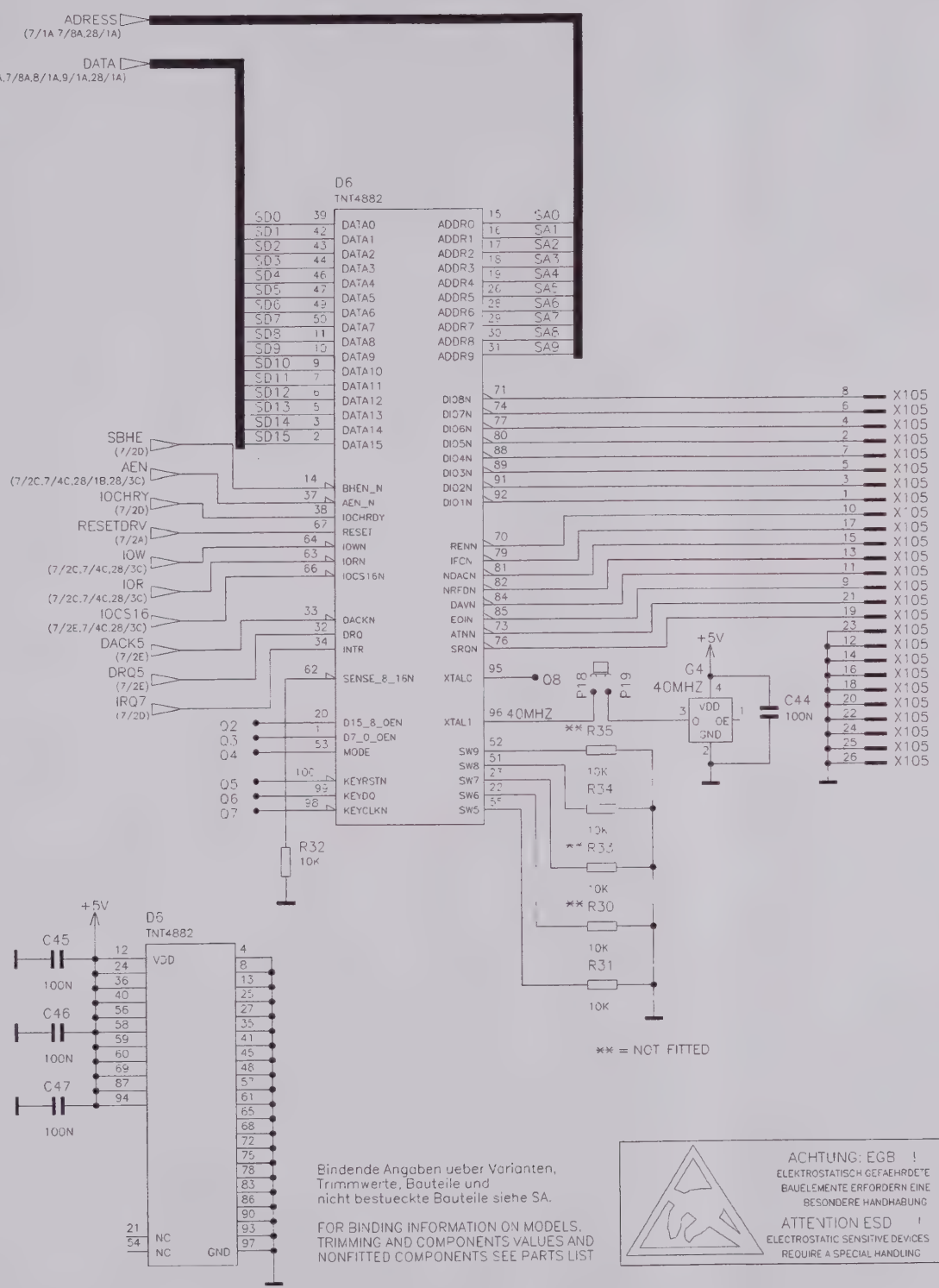
05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/DIGITAL_UNIT_4/DIGITAL_UNIT.4
				PLOTT	98-10-16	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR 10 +

DIESE UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR



05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/DIGITAL_UNIT_4/DIGITAL_UNIT.5
				PLOTT	98-10-16	SCHWAIGE	
				ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ZU GERAET AMIQ			REG.NV 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR 11 +

1 2 3 4

I-CHANNEL DAC

IDATA (9/8A)
SRCLK4 (10/30,12/1C)
I_DAC_CLK (10/8B)

D32 74ABT574D
D33 74ABT574D
D52 HI5741BIB
D50 AD9764AR
D83 LT1117CS
N50 UA7905UC
N52 UA7805UC
N32 UA7905UC
N46 MAX4108ESA
N47 MAX4108ESA
N13 MAX4108ESA

-1,20V I_AMPL_ADJ1 (26/4A)
+1,20V I_AMPL_ADJ2 (26/4A)
-5V-IDAC
+5V-IDAC
+5VDAC
-5VDAC
+5VI
-5VI
-12VA
+12VA

I_OFFSET_ADJ1 (26/4B)
max +/-1V
I_DAC_OUT (13/1B)
DIAG_IDAC (27/2B)

X5 SMB-ST

** = NOT FITTED

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ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05.06				1GPK	DATUM	NAME
				BEARB.		SR
				GEPR.		SR
				NORM		
				PLOTT	98-10-16	SCHWAIGE

AEND. IND. | AENDERUNGS-MITTEILUNG | DATUM | NAME

ROHDE&SCHWARZ

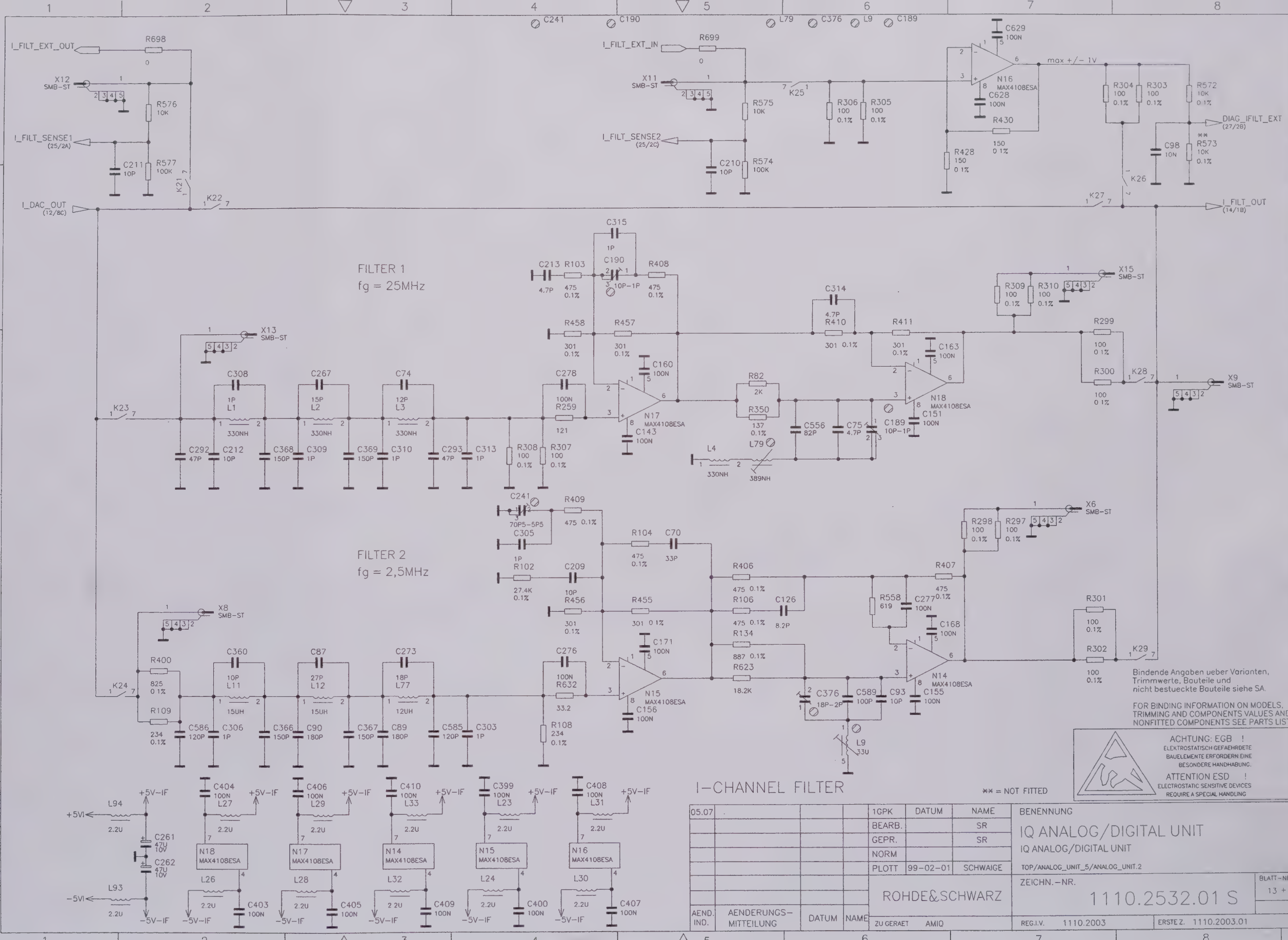
ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.1

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR. 12 +

REG.I.V. 1110.2003 | ERSTE Z. 1110.2003.01


I_FILT_EXT_OUT
R698
X12
SMB-ST
R576
10K
I_FILT_SENSE1
(25/2A)
C211
10P
R577
100K
K21
I_DAC_OUT
(12/8C)
K22
I_FILT_EXT_IN
R699
X11
SMB-ST
R575
10K
I_FILT_SENSE2
(25/2C)
C210
10P
R574
100K
K25
R306
100
0.1%
R305
100
0.1%
C629
100N
N16
MAX4108ESA
C628
100N
R430
150
0.1%
R428
150
0.1%
max +/- 1V
R304
100
0.1%
R303
100
0.1%
R572
10K
0.1%
DIAG_IFILT_EXT
(27/2B)
C98
10N
R573
10K
0.1%
K26
K27
I_FILT_OUT
(14/1B)
FILTER 1
fg = 25MHz
C315
1P
C213
4.7P
R103
475
0.1%
C190
10P-1P
R408
475
0.1%
R458
301
0.1%
R457
301
0.1%
C160
100N
C278
100N
R259
121
C143
100N
N17
MAX4108ESA
C314
4.7P
R410
301 0.1%
R411
301
0.1%
C163
100N
N18
MAX4108ESA
C151
100N
C189
10P-1P
R82
2K
R350
137
0.1%
L4
330NH
L79
389NH
C556
82P
C75
4.7P
X15
SMB-ST
R309
100
0.1%
R310
100
0.1%
R299
100
0.1%
R300
100
0.1%
K28
X9
SMB-ST
X13
SMB-ST
C308
1P
L1
330NH
C267
15P
L2
330NH
C74
12P
L3
330NH
C292
47P
C212
10P
C368
150P
C309
1P
C369
150P
C310
1P
C293
47P
C313
1P
R308
100
0.1%
R307
100
0.1%
C241
70P5-5P5
C305
1P
R409
475 0.1%
FILTER 2
fg = 2,5MHz
R104
475
0.1%
C70
33P
R102
27.4K
0.1%
C209
10P
R456
301
0.1%
R455
301 0.1%
R406
475 0.1%
R106
475 0.1%
C126
8.2P
R134
887 0.1%
R623
18.2K
R407
475
0.1%
R558
619
C277
100N
C168
100N
N14
MAX4108ESA
C155
100N
C376
18P-2P
C589
100P
C93
10P
L9
33U
R298
100
0.1%
R297
100
0.1%
X6
SMB-ST
R301
100
0.1%
R302
100
0.1%
K29
X8
SMB-ST
R400
825
0.1%
C360
10P
L11
15UH
C87
27P
L12
15UH
C273
18P
L77
12UH
C276
100N
R632
33.2
R109
234
0.1%
C586
120P
C306
1P
C366
150P
C90
180P
C367
150P
C89
180P
C585
120P
C303
1P
R108
234
0.1%
C171
100N
N15
MAX4108ESA
C156
100N
K23
K24
L94
+5VI
2.2U
C261
47U
10V
C262
47U
10V
L93
-5VI
2.2U
+5V-IF
-5V-IF
C404
100N
L27
N18
MAX4108ESA
L26
C403
100N
C406
100N
L29
N17
MAX4108ESA
L28
C405
100N
C410
100N
L33
N14
MAX4108ESA
L32
C409
100N
C399
100N
L23
N15
MAX4108ESA
L24
C400
100N
C408
100N
L31
N16
MAX4108ESA
L30
C407
100N
I-CHANNEL FILTER
** = NOT FITTED
Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.
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ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING
05.07
1GPK DATUM NAME
BEARB. SR
GEPR. SR
NORM
PLOTT 99-02-01 SCHWAIGE
AEND. IND.
AENDERUNGS-MITTEILUNG
DATUM
NAME
ROHDE&SCHWARZ
ZU GERAET AMIQ
BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.2
ZEICHN.-NR.
1110.2532.01 S
BLATT-NR
13 +
REG.I.V. 1110.2003
ERSTE Z. 1110.2003.01

VON DIESE UNTERLAGE
BEHALTEN WIR UNS ALLE RECHTE VOR

OUTPUT AMPLIFIER

+5V-IPA
V47 SM6T6V8A
V23 BAS216
-5V-IPA
V46 SM6T6V8A
V24 BAS216
P57
P58
P56

I_FILT_OUT (13/8B)
K30
R334 10
R642 100K
K31
R644 100K
R344 100K 0.1%
R643 100K
R312 100 0.1%
R311 100 0.1%
R434 150 0.1%
C280 100N
N20 MAX4108ESA
C279 100N

ATTENUATOR

0dB
20dB
40dB

R269 200 0.1%
R268 200 0.1%
R267 200 0.1%
R266 200 0.1%
K32
K33
K34
K35
K36
K37
R435 150 0.1%
R461 301 0.1%
R351 221 0.1%
R560 274 0.1%
R637 100K
R692 100K
R338 240 0.1%
R337 240 0.1%
R336 240 0.1%
R561 274 0.1%
R112 30.1K
R354 221 0.1%
R353 221 0.1%
R352 221 0.1%
R355 221 0.1%
R452 12.1K
R275 10K
R274 10K
C214 1P
I_OUT_DIAG (14/6C)
I_OUTPUT
I_OUT_SENSE (24/2D)

VAR GAIN AMPLIFIER

D56 AD835
I_OFFSET_ADJ2 (26/4D)
R469 10K
C542 1N
C319 1P
C543 1N
R546 1.21K
R433 150 0.1% max +/- 2V
C637 100N
R431 150 0.1%
C318 1P
R633 5.11K
R432 118 0.1%
C638 100N
N21 MAX4108ESA
R579 10K 0.1%
R578 10K 0.1%
C99 10N
DIAG_IAMPL_VAR (27/2B)
I_AMPL_VAR (26/4C)
R470 1K
R547 4.7K

R584 1K
REF2.5V (27/4C,27/8E)
N54 NE5534D
C102 22P
R585 10
C101 100N
+2.5V (14/4F,14/5E,14/7D)

+5VI
L35 2 2U
C250 47U 10V
C412 100N
C413 100N
C415 100N
D56 AD835
N20 MAX4108ESA
N21 MAX4108ESA
-5VI
L36 2 2U
C251 47U 10V
C411 100N
C414 100N
C416 100N

+5VA
C240 100N
N54 NE5534D
+2.5V (14/4E,14/4F,14/5E,14/7D)
D34 74LVC86DB
C419 100N
R170 10K
R169 10K

I-OUTPUT AMPLIFIER

R710 2.43K 0.1%
R286 1K 0.1%
N55 OP297GS
R694 10K 0.1%
C237 10N
DIAG_IPA_HF (27/2C)
I_OUT_DIAG (14/8A)
R239 100
C612 100N
V66 HSMS2805
R690 10K
R696 100K
C616 1N
R754 20K
R581 10K 0.1%
R580 10K 0.1%
C100 10N
DIAG_IPA (27/2C)
+2.5V (14/4E,14/4F,14/5E)
R590 10K 0.1%
R589 10K 0.1%
R645 100
C544 1N
R650 100
C547 1N
R591 10K 0.1%
R588 10K 0.1%
D34 74LVC86DB
R168 10K
C103 10N
Q_OUT_DIAG (17/5D,17/8A)
DIAG_I/Q_PHASE (27/2C)

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

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** = NOT FITTED

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05.06				1GPK	DATUM	NAME
				BEARB.		SR
				GEPR.		SR
				NORM		
				PLOTT	98-10-16	SCHWAIGE
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ZU GERAET AMIQ		

ROHDE&SCHWARZ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.3

ZEICHN.-NR. 1110.2532.01 S
BLATT-NR 14 +
REG.I.V. 1110.2003
ERSTE Z. 1110.2003.01

Q-CHANNEL DAC

QDATA (8/8A,9/8B)
SRCLK3 (10/3D,15/1C)
Q_DAC_CLK (10/8B)
Q_AMPL_ADJ1 (26/8A)
Q_AMPL_ADJ2 (26/8A)
Q_OFFSET_ADJ1 (26/8B)
Q_DAC_OUT (16/1B)
DIAG_QDAC (27/2B)
P10
P35
X51/X53
X16 SMB-ST

D30 74ABT574D
D31 74ABT574D
D51 AD9764AR
D53 HI5741BIB
N23 MAX4108ESA
N48 MAX4108ESA
N49 MAX4108ESA
N51 UA7905UC
N53 UA7805UC

+5V
+12VA
-12VA
-1,20V
+1,20V
+5VQ
-5VQ
+5V-QDAC
-5V-QDAC
+5VDAC
-5VDAC

max +/-1V

** = NOT FITTED

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ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05.07				1GPK	DATUM	NAME
				BEARB.		SR
				GEPR.		SR
				NORM		
				PLOTT	99-02-01	SCHWAIGE

AEND. IND. | AENDERUNGS-MITTEILUNG | DATUM | NAME

ROHDE&SCHWARZ

ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.4

ZEICHN.-NR. 1110.2532.01 S
BLATT-NR 15 +

REG.I.V. 1110.2003
ERSTE Z. 1110.2003.01

FOLGE UNS ALLEN RECHTE VOR
BEHALTEN WIR UNS ALLE

FILTER 1
fg = 25MHz

FILTER 2
fg = 2,5MHz

Q_FILT_EXT_OUT
Q_FILT_EXT_IN
Q_FILT_SENSE1 (25/2C)
Q_FILT_SENSE2 (25/2E)
Q_DAC_OUT (15/8C)
DIAG_QFILT_EXT (27/2B)
Q_FILT_OUT (17/1B)

max +/- 1V

N24 MAX4108ESA
N25 MAX4108ESA
N26 MAX4108ESA
N28 MAX4108ESA
N29 MAX4108ESA

** = NOT FITTED

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ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
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ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

Q-CHANNEL FILTER

05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT.5
				PLOTT	98-10-16	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR 16 +

FOLIEN DIESER UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR

OUTPUT AMPLIFIER

VAR GAIN AMPLIFIER

ATTENUATOR

0dB / 20dB / 40dB

Q_FILT_OUT (16/8B)
Q_OFFSET_ADJ2 (26/8D)
Q_AMPL_VAR (26/8C)
DIAG_QAMPL_VAR (27/2B)
Q_OUT_DIAG (14/6E,17/8A)
DIAG_QPA_HF (27/2C)
DIAG_QPA (27/2C)
Q_OUT_SENSE (24/2B)
Q_OUT_DIAG (14/6E,17/5D)
Q_OUTPUT
+5V-QPA
-5V-QPA
+5VQ
-5VQ
+5VA
-5VDAC

V49 SM6T6V8A
V48 SM6T6V8A
V26 BAS216
V25 BAS216
V66 HSMS2805

N31 MAX4108ESA
N30 MAX4108ESA
N55 OP297GS
D57 AD835

K10 K11 K12 K13 K14 K15 K16 K17

R448 150 0.1%
R271 200 0.1%
R272 200 0.1%
R273 200 0.1%
R270 200 0.1%
R449 150 0.1%
R468 301 0.1%
R638 100K
R693 100K
R357 221 0.1%
R563 274 0.1%
R335 10
R649 100K
R651 100K
R346 100K 0.1%
R648 100K
R339 240 0.1%
R340 240 0.1%
R341 240 0.1%
R562 274 0.1%
R113 30.1K
R358 221 0.1%
R359 221 0.1%
R360 221 0.1%
R361 221 0.1%
R453 12.1K
R276 10K
R277 10K
R331 100 0.1%
R330 100 0.1%
R471 10K
R550 1.21K
R545 1N
R472 1K
R551 4.7K
R445 150 0.1%
R634 5.11K
R446 118 0.1%
R447 150 0.1% max +/- 2V
R601 10K 0.1%
R602 10K 0.1%
R742 2.43K 0.1%
R707 1K 0.1%
R689 100
R691 10K
R697 100K
R695 10K 0.1%
R604 10K 0.1%
R603 10K 0.1%
R755 20K

C338 100N
C339 100N
C640 100N
C639 100N
C546 1N
C342 1P
C341 1P
C106 10N
C615 100N
C617 1N
C238 10N
C107 10N
C256 47U 10V
C257 47U 10V
C450 100N
C454 100N
C457 100N
C453 100N
C455 100N
C451 100N
C614 100N
C613 100N
C236 1P

L57 2.2U
L58 2.2U

P73
P74

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

** = NOT FITTED

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

BEHALTEN WIR UNS ALLE RECHTE VOR

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.07			

1GPK	DATUM	NAME
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	99-02-01	SCHWAIGE

ROHDE&SCHWARZ

ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.6

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR 17 +

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

REFERENCE OSCILLATOR

P76

P75

+5V-REF

V68 SM6T6V8A

R125 100

C464 100N

R263 470

REF_IN_10 (19/1A)

R523 51

D94 74HC14T

D59 74ABT125D

REFOUT

R636 33.2

L65 1U

L66 1U

C548 10N

R652 270

C378 390P

C374 680P

C379 390P

>0.5V eff 1.2Vpp into 50 Ohm

REFIN

0,5...2Veff Ri = 50 Ohm (7...20dBm)

C549 10N

R709 22.1

R711 33.2

C120 10N

R705 470

V13 BAV99

R165 220

R192 10K

R639 15K

V10 BSV52

VTCXO_OUT1 (19/8A)

R189 10K

R191 10K

C643 100N

C463 100N

R81 10K

R190 10K

R214 10K

REF_OUT_SEL (19/5E) H=VTCXO_10MHz L=REF FEEDTHROUGH

+5VA

PWRON_RESET (22/5C,23/2B,23/2D,24/2A)

WREN (7/5D)

R126 100

R193 10K

D19 74HC14T

IAIDI (7/5D)

R124 100

R188 10K

SER1_DATA_IN (21/1E)

IAIRD (7/5D)

R123 100

R187 10K

SER1_READ N.C.

IAIWR (7/5D)

R122 100

R186 10K

STROBE1 (19/2D,21/4C,21/5A,22/2C,27/2C) (27/8D)

STROBE1_DAC (21/1D)

IAICLK (7/5D)

R121 100

R185 10K

SER1_CLK (19/2D,21/1D,21/4A,22/2C,27/2C) (27/5B,27/8D)

IAIDO (7/5D)

R582 100

A/D_DATA (27/5B)

IGIDI (7/5D)

R120 100

R184 10K

SER2_DATA_IN (26/1A)

IGIRD (7/5D)

R119 100

R194 10K

SER2_READ (18/7D)

STROBE2 (23/2D,24/2D)

IGIWR (7/5D)

R118 100

R183 10K

STROBE2_DAC (26/1A,26/5A)

IGICLK (7/5D)

R117 100

R182 10K

SER2_CLK (18/7D,23/2E,24/2E,26/1A,26/5A)

IGIDO (7/5D)

R583 100

R586 100

R181 10K

BOARD ID

89 hex

R179 10K

R180 10K

R174 10K

R175 10001001 10K

D54 74HCT165T

SER2_CLK (18/6E,23/2E,24/2E,26/1A,26/5A)

SER2_READ (18/6D)

ATT_CNTRL_DATA (24/4E)

OPT_ID0 (24/4E)

OPT_ID1 (24/4E)

R178 10K

R177 10K

R172 10K

R758 10K

R757 10K

R176 10K

R173 10K

L64 1U

L63 1U

C285 100N

C345 1U 10V

C284 100N

C344 1U 10V

+12V-REF

+12VA

-12VA

-12V-REF

R278 39 1W

N6 LT1117CS

C183 10U 25V

R704 301

R703 100

C346 1U 10V

C462 100N

C461 100N

C458 100N

C459 100N

C460 100N

** = not fitted

SERIAL CONTROL INTERFACE

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
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Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

AEND IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

	DATUM	NAME
1GPK		
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

BENENNUNG

IQ ANALOG/DIGITAL UNIT

IQ ANALOG/DIGITAL UNIT

TOP/ANALOG_UNIT_5/ANALOG_UNIT.7

ROHDE&SCHWARZ

ZU GERAET AMIQ

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR. 18 +

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

BEHALTEN WIR UNS ALLE RECHTE VOR

REFERENCE OSCILLATOR

P36 P80 P77 P78

+5V-REF
R210 10K
R211 10K
D35 74AC74M
REF_IN_10 (18/5A)
R209 10K
R208 10K
C111 10N
R196 10K
N11 TL072ACD
R362 330K
C245 22P
R363 330K
C3 220N
V58 BAV70
R566 274
VTCXO_OUT2 (19/8B)
R207 10K
R206 10K
C108 10N
R195 10K
N11 25V TL072ACD
R127 100
D40 DG419DY
DIAG_VTCXO_TUNE (27/2B)
0...2,5V
C109 10N
V8 BAS216
R204 10K
R205 10K
P79 0...5V
R451 2.2K
C420 2.2U
R587 10
C110 10N
V51 BZX284B5V1
+5V-REF
L91 47U
C558 4.7U 25V
B1 VCXO 10MHZ
P20 P21
D70 74HC14T
P78
R526 51
VTCXO_OUT1 (18/5B)
R525 51
VTCXO_OUT2 (19/1B)
R524 51
REF_10MHZ
D55 74ACT125T
R594 51
X27 SMB-ST
SYN_REF (20/1A)
10 MHz
5 MHz
2.5 MHz
D36 74AC74M
R202 10K
R203 10K
R201 10K
R200 10K

+12V-REF
R364 10
C559 4.7U 25V
G7 REF02CS
R630 20K 0.1%
-5V
C478 100N
REF-5V (21/1D)
R629 10K 0.1%
R473 10K 0.1%
C560 4.7U 25V
N33 OP297GS
D74 DAC8143
VREF RFB
\CLR
\LD1
\LD2
STB1 IOUT1
STB2
\STB3 IOUT2
STB4
SRI SRO
VTCXO_TUNE
P77 0...5V
C78 12P
N33 OP297GS

D70 74HC14T
COUNTER_DATA (22/3E)
STROBE1 (27/8D)
(18/3D,21/4C,21/5A,22/2C,27/2C)
SER1_CLK (27/5B,27/8D)
(18/3E,21/1D,21/4A,22/2C,27/2C)
+5V-REF
R197 10K
D42 74HCT4094T
C2
EN3
SRG
C1/
1D
2D 3
REF10_SEL
REF_OUT_SEL (18/1B)
SYN_REF_SEL0 (19/6E)
SYN_REF_SEL1 (19/6E)
SYN_CLK_SEL0 (22/2B)
SYN_CLK_SEL1 (22/2B)
SYN_CLK_SEL2 (22/2B)
REF10_DATA (21/4A)

+5V-REF
R198 10K
D68 74HCT138T
(19/5E) SYN_REF_SEL0
(19/5E) SYN_REF_SEL1
R199 10K

+12V-REF
R368 10
R367 10
C468 100N
C470 100N
C472 100N
C467 100N
C476 100N
C471 100N
R365 10
R366 10
N33 OP297GS
D40 DG419DY
N11 TL072ACD
-12V-REF

C477 C469 C473 C474 C475 C465 C466 100N
D68 74HCT138T
D35 74AC74M
D36 74AC74M
D55 74ACT125T
D70 74HC14T
D42 74HCT4094T
D74 DAC8143

Bindende Angaben ueber Varianten, Trimmwerte, Bouteile und nicht bestueckte Bouteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

** = NOT FITTED

REFERENCE LOOP

05.07				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			
				PLOTT	99-02-01	SCHWAIGE	TOP/ANALOG_UNIT_5/ANALOG_UNIT.8
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR 19 +

BEHALTEN WIR UNS ALLE RECHTE VOR

PHASEDETECTOR

LOOPFILTER

VOLTAGE CONTROLLED OSCILLATOR

CLOCK SYNTHESIZER

P82

P81

N5 LM78L12ACD

+24VSYN

C561 4.7U 35V

C562 4.7U 25V

C644 100N

+5VSYN +5VSYN

R218 10K

R217 10K

D37 74AC74M

SYN_REF (15/88)

R348 9.09K

R475 1K

R216 10K

R677 10K

P82 max +/- 5v

C113 1N

DIAG_VCO (27/28)

C114 10N

V81 BAV99

V59 BAV70

R567 274

N12 NE5534AD

C68 22P

R474 1K

R454 470K

R349 9.09K

D37 74AC74M

DDS_CLK_OUT (21/88)

R347 9.09K

R476 1K

C112 1N

R219 10K

C552 33N

P81 0...18V

C348 2.2U

C375 1U

R543 1K

C479 100N

N27 NE5534AD

C69 22P

R265 470

C550 100N

C421 2.2U

R678 10

X28 X28

V11 BZX284B10

V69 BZX284B8V2

G8 100-200MHZ

VCO

R114 100

R128 100

R130 100

C553 2.2N

VCO FREQUENCY

+2V	100MHz
+15V	200MHz

+12VSYN

C481 100N

R101 221

C480 100N

+2,8V

L70 1U

N3 MSA0386

C554 2.2N

R75 68

R687 100

R77 100

C662 2.2N

N2 MC12093

C663 100P

R264 470

C551 2.2N

V54 BFP183

R564 4.7K

C555 2.2N

BCX71J V56

R220 10K

+5VSYN

SW1 SW2 SW3/SB

PRESCALE_SEL1 (21/5C)

R224 10K

R223 10K

+5VSYN

BCX71J V55

PRESCALE_SEL0 (21/5C)

R212 10K

R213 10K

+5VSYN

PRESCALE		
SEL1	SEL0	N
0	0	2
0	1	4
1	0	4
1	1	8

+5VSYN

R129 100

C115 10N

L71 1U

R450 150

R222 6.8K

R527 51

D60 74ABT125D

R528 27.4

P31 50...100MHz

HIGH_CLK (22/2A)

R215 10K

D60 74ABT125D

R529 27.4

DDS_CLK (21/1A)

R657 10K

+5V-BUF

R655 10K

D60 74ABT125D

R536 10K

+5V-BUF

R656 10K

D60 74ABT125D

R221 10K

+24VA

L69 1U

+24VSYN

C288 100N

C289 100N

+12VA

L68 1U

+12VSYN

C287 100N

C596 4.7U 25V

-12VA

L67 1U

-12VSYN

C286 100N

C597 4.7U 25V

+24VSYN

R261 200

C184 10U 25V

V70 V45 BZX284B10

BZX284B10

C290 100N

N27 NE5534AD

C291 100N

V22 BZX284B6V8

C185 10U 25V

R131 200

-12VSYN

+5VSYN

C484 100N

N2 MC12093

+5VSYN

L72 1U

C353 1U 10V

D37 74AC74M

C485 100N

+5V-BUF

L73 1U

C350 1U 10V

D60 74ABT125D

C483 100N

+12VSYN

R281 20

R280 20

N7 LM78L05ACM

+5VSYN

C352 1U 10V

C351 1U 10V

+12VSYN

C645 100N

N12 NE5534AD

C646 100N

-12VSYN

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

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** = NOT FITTED

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

CLOCK-SYNTHESIZER

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.07			

	1GPK	DATUM	NAME
BEARB.			SR
GEPR.			SR
NORM			
PLOTT	99-02-01		SCHWAIGE

ZU GERAET AMIQ

BENENNUNG

IQ ANALOG/DIGITAL UNIT

IQ ANALOG/DIGITAL UNIT

TOP/ANALOG_UNIT_5/ANALOG_UNIT.9

ROHDE&SCHWARZ

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR. 20 +

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

FOR DISPLAY UNIT
BEHALTEN WIR UNS ALLE RECHTE VOR

DDS OSCILATOR

DDS_CLK SELECT

CLK-FREQUENCY	DDS_CLK SEL1	DDS_CLK SEL0
max 100 MHz	1	1
50 MHz	1	0
20 MHz	0	1
OFF	0	0

DDS-DIVIDER CIRCUIT

** = NOT FITTED

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ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05.06				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT.10
				PLOTT	98-10-16	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR. 21 +

FOR DIESE UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR

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ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

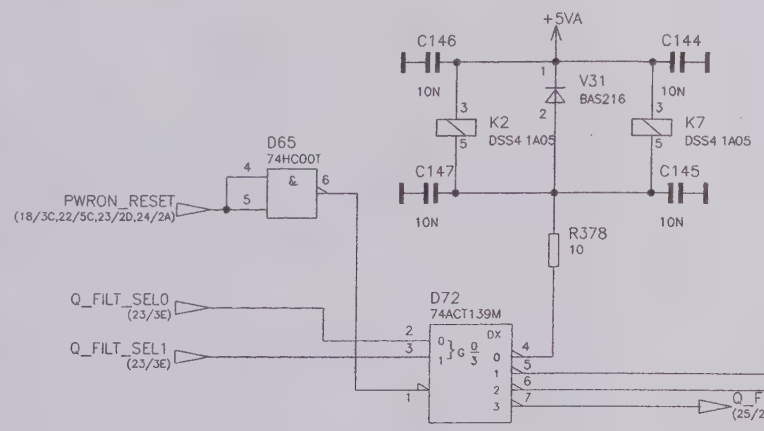
PROGRAMMABLE CLOCK COUNTER

** = NOT FITTED

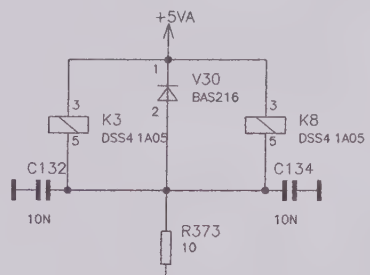
05.07				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT.11
				PLOTT	99-02-01	SCHWAIGE	
				ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

BLATT-NR 22 +

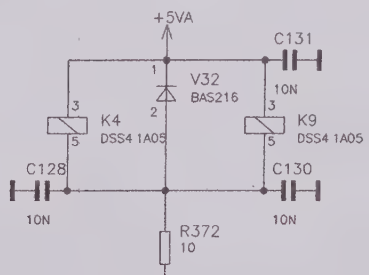
FILTER OFF



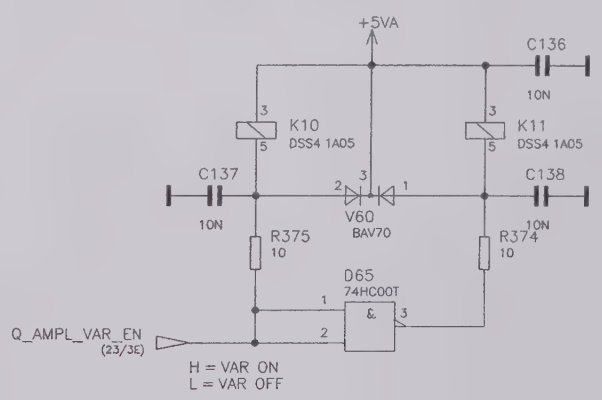
FILTER 1

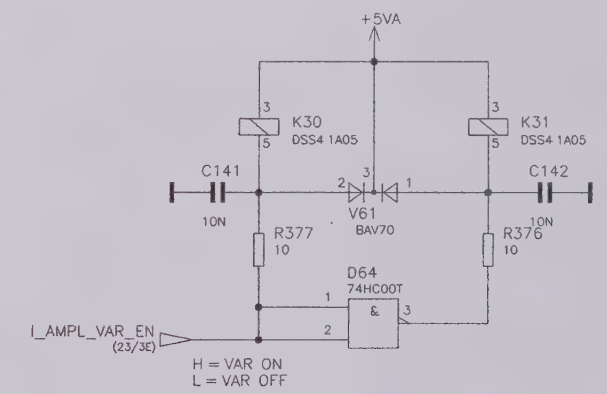


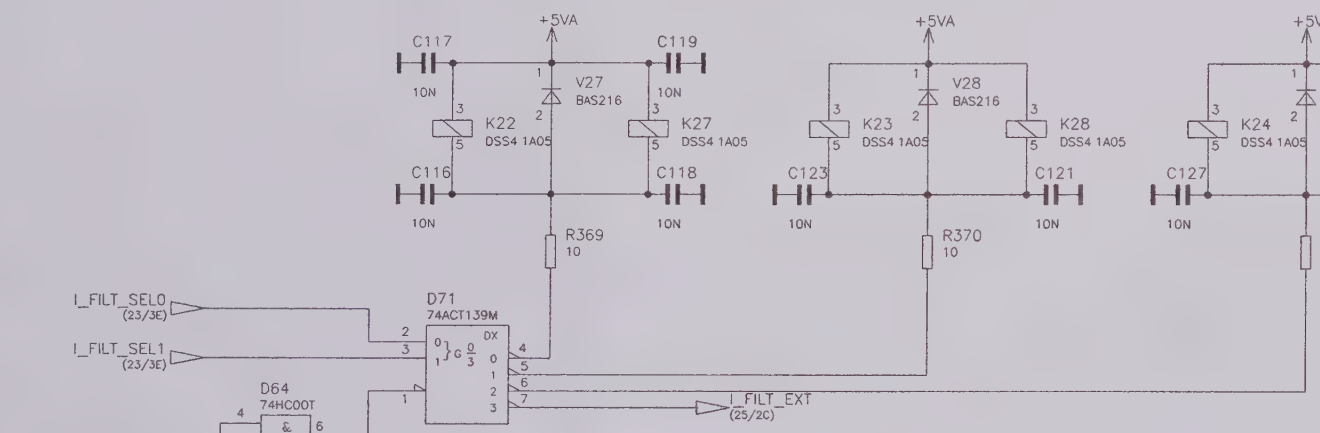
FILTER 2

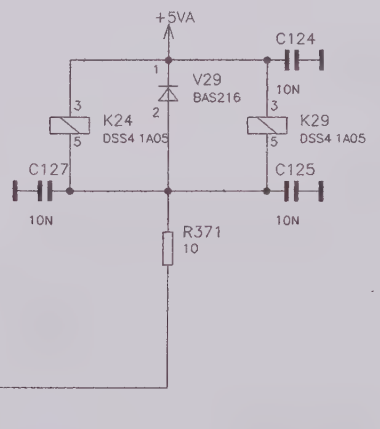


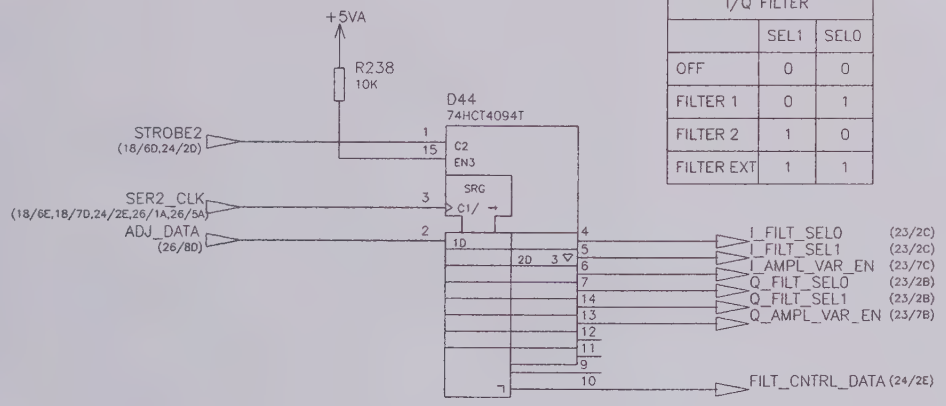
VAR AMPL



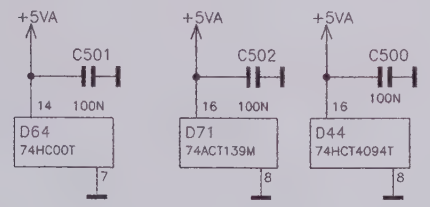








I/Q FILTER		
	SEL1	SEL0
OFF	0	0
FILTER 1	0	1
FILTER 2	1	0
FILTER EXT	1	1



Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODEL TRIMMING AND COMPONENTS VALUES NONFITTED COMPONENTS SEE PARTS

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
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** = NOT FITTED

FILTER CONTROL

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

	DATUM	NAME
1GPK		
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.12

ROHDE&SCHWARZ

ZEICHN.-NR. 1110.2532.01 S

REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

OUTPUT OVERVOLTAGE PROTECTION

PWRON_RESET
(18/3C,22/5C,23/2B,23/2D)

Q_OUT_SENSE
(17/8C)

I_OUT_SENSE
(14/8C)

+5VA
-5VDAC

V15 BAV99
V16 BAV99

U1 LM339D

R144 1.62K
R143 1.62K
R484 2K
R485 2K
R138 200K
R137 200K
R243 10K
R242 10K
R244 10K
R241 10K
R240 10K

V34 BAS216
V33 BAS216

C565 1U 10V
C564 1U 10V
C566 1U 10V
C563 1U 10V

D65 74HC00T
D64 74HC00T
D72 74ACT139M
D71 74ACT139M
D86 74ACT125T
D45 74HCT4094T

Q_ATT_SEL0 (24/4E)
Q_ATT_SEL1 (24/4E)
I_ATT_SEL0 (24/4E)
I_ATT_SEL1 (24/4E)
I_OUT_EN (24/4E)
Q_OUT_EN (24/4E)
I_DIAG_EN (27/3D)
Q_DIAG_EN (27/3D)

STROBE2 (18/6D,23/2D)
SER2_CLK (18/6E,18/7D,23/2E,26/1A,26/5A)
FILT_CNTRL_DATA (23/3E)

I_ATT_SEL0 (24/4C)
I_ATT_SEL1 (24/4C)
Q_ATT_SEL0 (24/4A)
Q_ATT_SEL1 (24/4B)
I_OUT_EN (24/4C)
Q_OUT_EN (24/4D)
ATT_CNTRL_DATA (18/7D)

I/Q OUTPUT ATTENUATOR		
	SEL1	SEL0
0dB	0	0
20dB	0	1
40dB	1	0
RESERVED (OFF)	1	1

0dB

K12 DSS4 1A05
K13 DSS4 1A05
K32 DSS4 1A05
K33 DSS4 1A05
V65 BAV70
V62 BAV70
V67 BAS216
V57 BAS216
K17 DSS4 1A05
K37 DSS4 1A05

C161 10N
C162 10N
C148 10N
C150 10N
C149 10N
C634 10N
C239 10N
R386 10
R385 10
R379 10
R380 10
R345 10
R343 10

20dB

K14 DSS4 1A05
K15 DSS4 1A05
K34 DSS4 1A05
K35 DSS4 1A05
V64 BAV70
V63 BAV70
V80 BAS216
V79 BAS216
K16 DSS4 1A05
K36 DSS4 1A05

C158 10N
C157 10N
C159 10N
C153 10N
C154 10N
C152 10N
C636 10N
C635 10N
R383 10
R384 10
R382 10
R381 10
R569 10
R565 10

40dB

Bindende Angaben ueber Varianten,
Trimmwerte, Bauteile und
nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS,
TRIMMING AND COMPONENTS VALUES AND
NONFITTED COMPONENTS SEE PARTS LIST

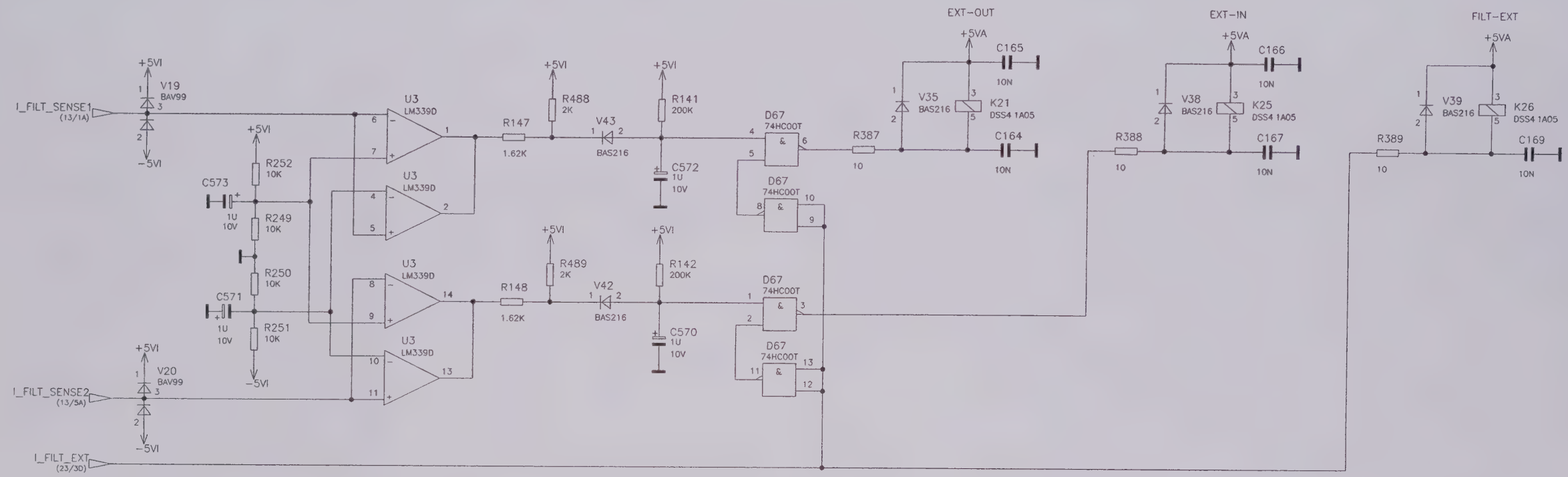
ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE
BAUELEMENTE ERFORDERN EINE
BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES
REQUIRE A SPECIAL HANDLING

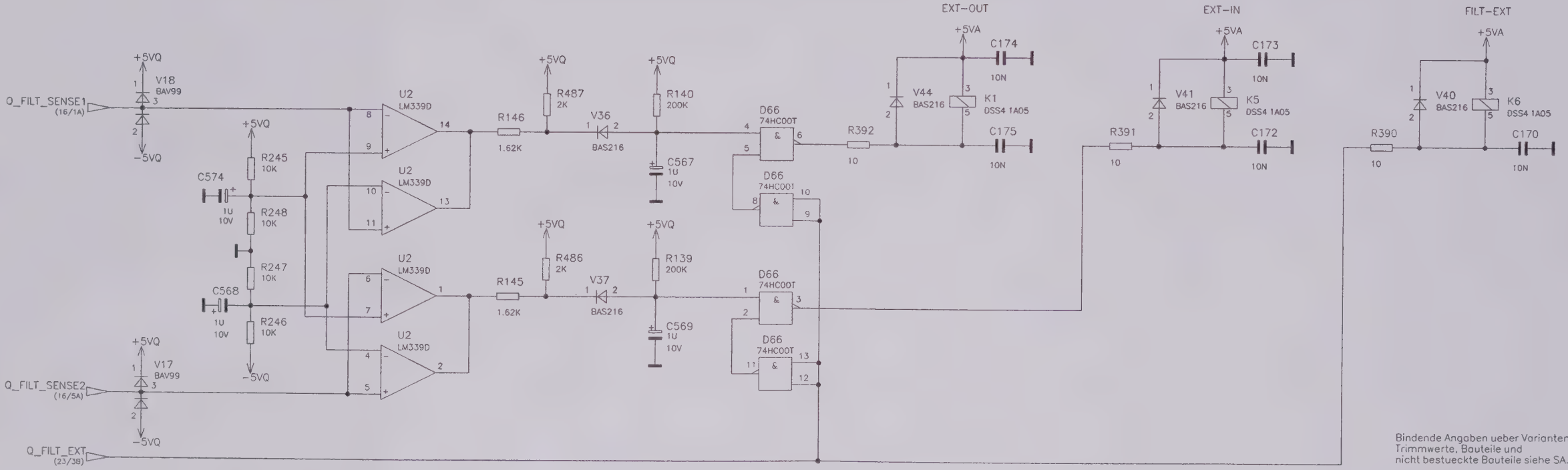
C641 100N D86 74ACT125T
C503 100N D45 74HCT4094T
C506 100N D65 74HC00T
C507 100N D72 74ACT139M
C505 100N
C504 100N

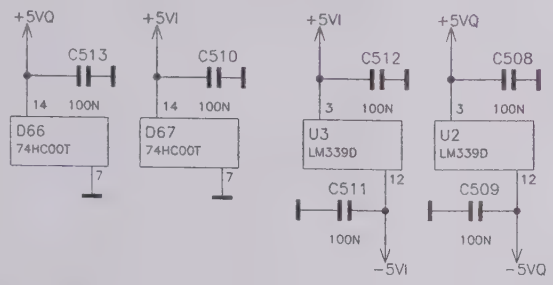
OUTPUT AND ATTENUATOR CONTROL

** = NOT FITTE

05.07				1GPK	DATUM	NAME	BENENNUNG	
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT	
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT	
				NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT.13	
				PLOTT	99-02-01	SCHWAIGE		
							ROHDE&SCHWARZ	ZEICHN.-NR. 1110.2532.01 S
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME				ZU GERAET AMIQ	REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01







** = NOT FITTED

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

EXT-FILTER IN/OUT PROTECTION

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

	DATUM	NAME
1GPK		
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

ZU GERAET AMIQ

ROHDE&SCHWARZ

BENENNUNG

IQ ANALOG/DIGITAL UNIT

IQ ANALOG/DIGITAL UNIT

TOP/ANALOG_UNIT_5/ANALOG_UNIT.14

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR 25 +

REG.I.V. 1110.2003

ERSTE Z. 1110.2003.01

ADJ_REF (26/2E,26/5A)
+5V-ADJ
STROBE2_DAC (18/60,26/5A)
SER2_CLK (18/6E,18/7D,23/2E,24/2E,26/5A)
SER2_DATA_IN (18/6C)

D82 DAC8143 — R167 18.2K 0.1% — R628 49.9K 0.1% — C86 12P — N40 OP297GS
D81 DAC8143 — R557 20K 0.1% — R616 10K 0.1% — C85 12P — N39 OP297GS
D79 DAC8143 — R556 20K 0.1% — R615 10K 0.1% — C83 12P — N41 OP297GS
D80 DAC8143 — R555 20K 0.1% — R614 10K 0.1% — C84 12P — N38 OP297GS

R626 21.5K 0.1% — N40 OP297GS — R620 10K 0.1% — R613 10K 0.1% — N43 OP97 (+1V...+1,5V)
R619 20K 0.1% — N39 OP297GS
R618 20K 0.1% — N41 OP297GS
R617 20K 0.1% — N38 OP297GS

P90 P88...P90 P89 −1,2V...+1,2V P87 −1,2V...+1,2V P88 −1,2V...+1,2V

I_AMPL_ADJ2 (12/4D)
I_AMPL_ADJ1 (12/4A) −1,5V...−1V
I_OFFSET_ADJ1 (12/7B)
I_AMPL_VAR (14/1D)
I_OFFSET_ADJ2 (14/1D)

ADJ

+5V-ADJ — R253 10K — DIAG_ADJ_REF (27/2B)
R342 392 — R631 33K — N45 OP97 — +1,2V — ADJ_REF (26/1A,26/5A)
C188 10U 25V — V12 LT1004-1.2 — C579 4.7U 25V

C347 C349 C417 C418 C452 C456 C592 C593 — 100N — D82 D81 D80 D79 D78 D77 D76 D75 DAC8143

C533 C530 C528 C526 C525 C523 C521 C518 C594 C516 C515 — 100N
N34 N35 N36 N37 N38 N39 N40 N41 N43 OP97 N44 OP97 N45 OP97
C532 C531 C529 C527 C524 C522 C520 C519 C595 C517 C514 — 100N
−5V-ADJ

ADJUSTMENT DAC s

ADJ_REF (26/1A,26/2E)
+5V-ADJ
STROBE2_DAC (18/60,26/1A)
SER2_CLK (18/6E,18/7D,23/2E,24/2E,26/1A)

D78 DAC8143 — R166 18.2K 0.1% — R627 49.9K 0.1% — C82 12P — N36 OP297GS
D77 DAC8143 — R554 20K 0.1% — R608 10K 0.1% — C81 12P — N35 OP297GS
D76 DAC8143 — R553 20K 0.1% — R607 10K 0.1% — C79 12P — N37 OP297GS
D75 DAC8143 — R552 20K 0.1% — R606 10K 0.1% — C80 12P — N34 OP297GS

R625 21.5K 0.1% — N36 OP297GS — R612 10K 0.1% — R605 10K 0.1% — N44 OP97 (+1V...+1,5V)
R611 20K 0.1% — N35 OP297GS
R610 20K 0.1% — N37 OP297GS
R609 20K 0.1% — N34 OP297GS

P86 P83...86 P85 −1,2V...+1,2V P83 −1,2V...+1,2V P84 −1,2V...+1,2V

Q_AMPL_ADJ2 (15/4D)
Q_AMPL_ADJ1 (15/4A) −1,5V...−1V
Q_OFFSET_ADJ1 (15/7B)
Q_AMPL_VAR (17/1D)
Q_OFFSET_ADJ2 (17/1D)

ADJ_DATA (23/2E)

+12VA — R291 20 — R290 20 — N9 LM78L05ACM — C575 4.7U 25V — C576 4.7U 25V — +5V-ADJ
−12VA — R288 20 — R289 20 — N4 LM79L05ACD — C577 4.7U 25V — C578 4.7U 25V — −5V-ADJ

** = NOT FITTED

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05.07					1GPK	DATUM	NAME	BENENNUNG
					BEARB		SR	IQ ANALOG/DIGITAL UNIT
					GEPR.		SR	IQ ANALOG/DIGITAL UNIT
					NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT 15
					PLOTT	99-02-01	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG		DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
					ZU GERAET AMIQ			REG.I.V. 1110.2003 ERSTE Z 1110 2003.01

BLATT-NR 26 +

P92 P93 P32

DIAGNOSE CHANNEL CONTROL (DIAG_)							
DIAG No.	MEASUREMENT	SEL3	SEL2	SEL1	SEL0	I_DIAG EN	Q_DIAG EN
0	GROUND REFERENCE	0	0	0	0		
1	Uref A/D CONVERTER	0	0	0	1		
2	Uref ADJ-DACs	0	0	1	0		
3	10MHz VTCXO VOLTAGE	0	0	1	1		
4	VCO CONTROL VOLTAGE	0	1	0	0		
5	IDAC-OUTPUT	0	1	0	1		
6	QDAC-OUTPUT	0	1	1	0		
7	EXT - IFILTER	0	1	1	1		
8	EXT - QFILTER	1	0	0	0		
9	I-AMPL-VARIATION	1	0	0	1		
10	Q-AMPL-VARIATION	1	0	1	0		
11	I-OUTPUT	1	0	1	1	1	
12	I-HF_AMPL	1	1	0	0	1	
13	Q-OUTPUT	1	1	0	1		1
14	Q-HF_AMPL	1	1	1	0		1
15	I/Q PHASE	1	1	1	1	1	1

OPTION CONNECTOR

Bindende Angaben ueber Varianten, Trimmwerte, Bauteile und nicht bestueckte Bauteile siehe SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST

** = NOT FITTED

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

DIAGNOSE CIRCUIT

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
05.06			

	DATUM	NAME
1GPK	DATUM	NAME
BEARB.		SR
GEPR.		SR
NORM		
PLOTT	98-10-16	SCHWAIGE

ROHDE&SCHWARZ

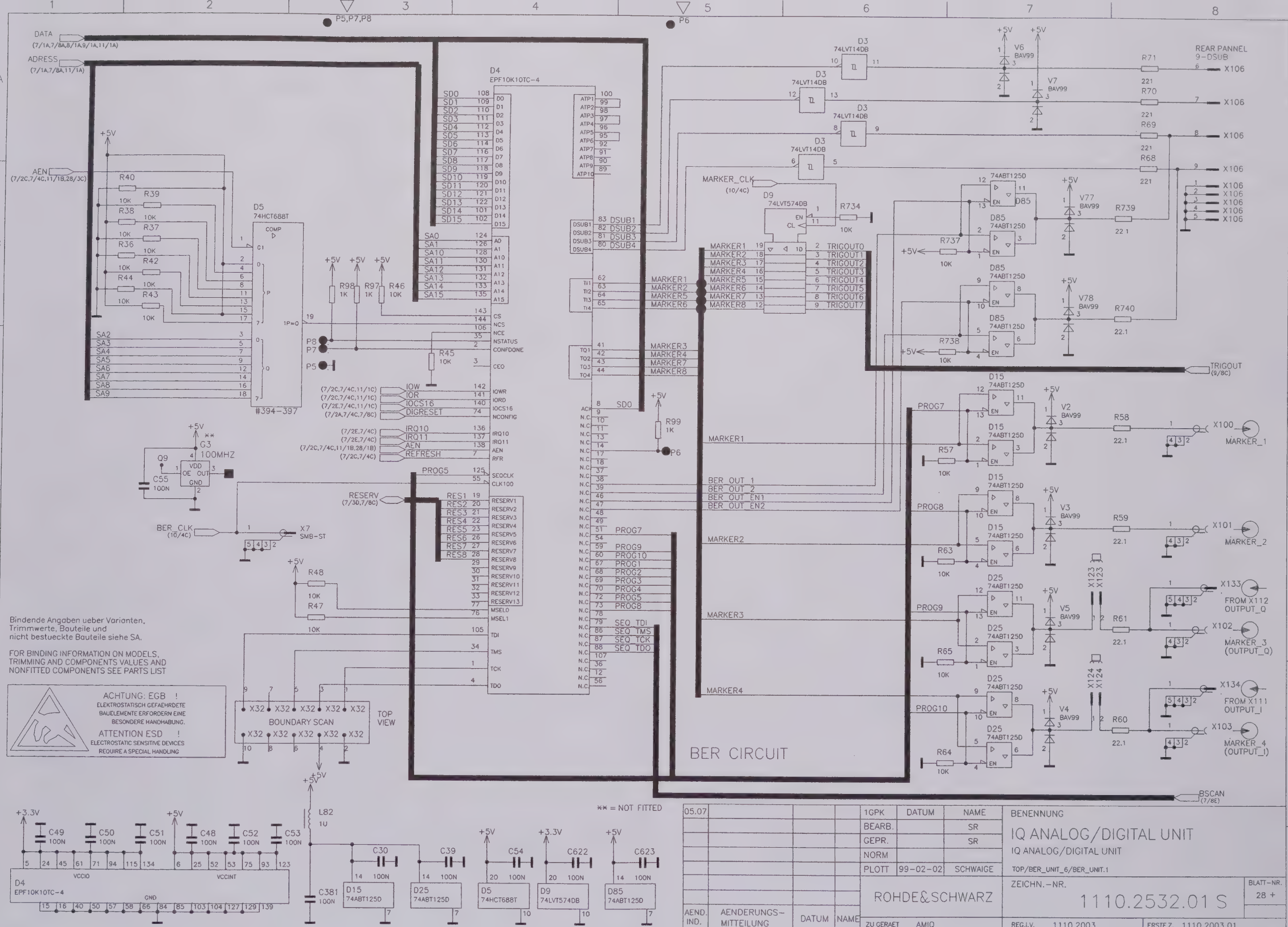
ZU GERAET AMIQ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT
TOP/ANALOG_UNIT_5/ANALOG_UNIT.16

ZEICHN.-NR. 1110.2532.01 S

BLATT-NR 27 +

REG.I.V. 1110.2003 ERSTE Z. 1110.2003.01

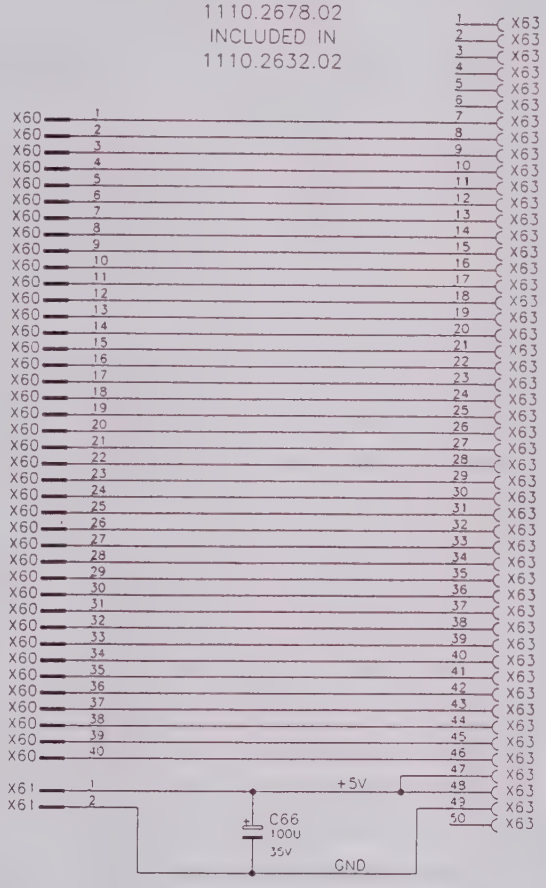


05.07				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		SR	IQ ANALOG/DIGITAL UNIT
				GEPR.		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/BER_UNIT_6/BER_UNIT.1
				PLOTT	99-02-02	SCHWAIGE	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
				ZU GERAET	AMIQ	REG.I.V. 1110.2003	ERSTE Z. 1110.2003.01

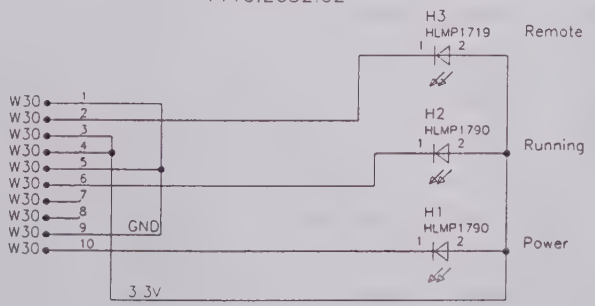
BLATT-NR. 28 +

BEHALTEN WIR UNS ALLE RECHTE VOR

HDD ADAPTER
1110.2678.02
INCLUDED IN
1110.2632.02



LED BOARD
1110.2661.02
INCLUDED IN
1110.2632.02



ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

05 04				1GPK	DATUM	NAME	BENENNUNG
				BEARB		SR	IQ ANALOG/DIGITAL UNIT
				GEPR		SR	IQ ANALOG/DIGITAL UNIT
				NORM			TOP/ANALOG_UNIT_5/ANALOG_UNIT 17
				PLOTT	98-09-08	SCHWAIGE	
				ROHDE&SCHWARZ			ZEICHN.-NR. 1110.2532.01 S
							BLATT-NR 29 -
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ZU GERAET AMIQ			REG.I V 1110.2003 ERSTE Z. 1110.2003 01

1 2 3 4

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS				
B1	EO 10MHZ-QU.OSZ VTCXO 5V OSCILLATOR VTCXO	1039.3113.00	MILLIREN	453-0210	
B2	EQ 32,768KHZ MC-306 QUARTZ CRYSTAL UNIT	1097.6557.00	SEIKO	MC-306 32,768 KHZ	
C1	CC 1UF+-10% 50V X7R 2220 CERAMIC CAPACITOR	CC 0520.6873.00	AVX	2220 5C 105 KAT**A(F	
C2	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C3	CK 220NF+-5% 25V PPS 2220 SMD-FILM-CAPACITOR	0009.7872.00	PHILIPS_CO	2222 393 29224	
C4 ..55	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C56	CE 100UF+-20% 20V RM5 CAPACITOR	3528.5975.00	SANYO	20 SH 100 M	
C57	CE 100UF+-20%25V RM2.5 ELECTROLYTIC CAPACITOR	CE 0008.7891.00	PANASONIC	ECA-1EFG101I	
C58	CE 22UF+-20%35V RUND SMD SMD-ELEKTROLYTIC-CAPACIT.	CE 0009.6253.00	PANASONIC	EEV HB 1V 220P	
C59	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39C0G***F50ZPT	
C60	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39C0G***F50ZPT	
C61 ..65	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C66	CE 100UF+-20%35V RM5 ELECTROLYTIC CAPACITOR	0008.7510.00	PHILIPS_CO	2222 116 90042	
C67	CC 12PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8256.00	MURATA	GRM39C0G***F50ZPT	
C68	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39C0G***F50ZPT	
C69	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39C0G***F50ZPT	
C70	CC 33PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0048.3639.00	MURATA	GRM39C0G***B50ZPT	
C71	CC 33PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0048.3639.00	MURATA	GRM39C0G***B50ZPT	
C72	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
C73	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C74	CC 12PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8256.00	MURATA	GRM39C0G***F50ZPT	
C75	CC 4,7PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39C0G***B50ZPT	
C76	CC 4,7PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39C0G***B50ZPT	
C77 ..86	CC 12PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8256.00	MURATA	GRM39C0G***F50ZPT	
C87	CC 27PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0010.9323.00	MURATA	GRM39C0G***F50ZPT	
C88	CC 27PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0010.9323.00	MURATA	GRM39C0G***F50ZPT	
C89 ..92	CC 180PF+-1% 50V NPO 0603 SMD-CERAMIC-CAPACITOR	1097.6305.00	MURATA	GRM39C0G***F50ZPT	
C93	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39C0G***B50ZPT	
C94	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39C0G***B50ZPT	
C95 ..100	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C101	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C102	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39C0G***F50ZPT	
C103 ..111	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C112	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C113	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C114 ..121	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C122	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	

Für diese Unterlage behalten wir uns alle Rechte vor.

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C123	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..125	SMD-CERAMIC-CAPACITOR				
C126	CC 8,2PFO,1PF50V NPO 0603	0009.4550.00	MURATA	GRM39COG***B50ZPT	
	SMD-CERAMIC-CAPACITOR				
C127	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C128	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C129	CC 8,2PFO,1PF50V NPO 0603	0009.4550.00	MURATA	GRM39COG***B50ZPT	
	SMD-CERAMIC-CAPACITOR				
C130	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..132	SMD-CERAMIC-CAPACITOR				
C133	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C134	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C135	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C136	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..138	SMD-CERAMIC-CAPACITOR				
C139	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C140	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C141	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C142	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C143	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C144	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..150	SMD-CERAMIC-CAPACITOR				
C151	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C152	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..154	SMD-CERAMIC-CAPACITOR				
C155	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C156	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C157	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..159	SMD-CERAMIC-CAPACITOR				
C160	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C161	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C162	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C163	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C164	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..167	SMD-CERAMIC-CAPACITOR				
C168	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C169	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C170	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
	SMD-CERAMIC-CAPACITOR				
C171	CC 100NF+-10%16V HDK 0603	1097.6292.00	PHILIPS_CO	2238 786 16649	
	CERAMIC CHIP CAPACITOR				
C172	CC 10NF+-10% 50VHDK 0603	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
..177	SMD-CERAMIC-CAPACITOR				
C178	CC 68PF+-1% 50VNPO 0603	0009.9746.00	MURATA	GRM39COG***F50ZPT	
	SMD-CERAMIC-CAPACITOR				
C179	CC 33NF+-10% 25V HDK 0603	1051.4697.00	AVX	CM105X7R333K25VAT	
..182	CERAMIC CHIP CAPACITOR				
C183	CE 10UF +-10% 25V 7343	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
..188	TANTALUM SMD-CAPACITOR				
C189	CT 9PF 250V LUFTTR.KONZ.	CT 0564.6885.00	TEKELEC	AT 5276	
..192	AIR TRIMMER				
C193	CC 10PF+-0,1 50V NPO 0603	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
..206	SMD-CERAMIC-CAPACITOR				
C207	CC 15PF+-1% 50VNPO 0603	0009.8227.00	MURATA	GRM39COG***F50ZPT	
	SMD-CERAMIC-CAPACITOR				
C208	CC 18PF+-1% 50VNPO 0603	0048.3622.00	MURATA	GRM39COG***F50ZPT	
	SMD-CERAMIC-CAPACITOR				
C209	CC 10PF+-0,1 50V NPO 0603	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
..212	SMD-CERAMIC-CAPACITOR				

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C213	CC 4,7PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39COG***B50ZPT	
C214	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C215 ..228	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C229	CC 15PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8227.00	MURATA	GRM39COG***F50ZPT	
C230	CC 18PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0048.3622.00	MURATA	GRM39COG***F50ZPT	
C231 ..233	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C234	CC 4,7PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39COG***B50ZPT	
C235	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C236	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C237 ..239	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C240	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C241	CT 65PF FOLIE LIEG.ABGL.0 TRIMMER	0037.7896.00	VALVO	2222 808 32659	
C242	CT 65PF FOLIE LIEG.ABGL.0 TRIMMER	0037.7896.00	VALVO	2222 808 32659	
C243	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C244	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C245	CC 22PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4609.00	MURATA	GRM39COG***F50ZPT	
C246 ..264	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C265	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C266	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C267	CC 15PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8227.00	MURATA	GRM39COG***F50ZPT	
C268	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C269	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C270	CC 15PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8227.00	MURATA	GRM39COG***F50ZPT	
C271	CC 15PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8227.00	MURATA	GRM39COG***F50ZPT	
C272	CC 330PF+-5% 50V HDK 0603 SMD CERAMIC CAPACITOR	1097.6205.00	MURATA	GRM39X7R331J50PT	
C273	CC 18PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0048.3622.00	MURATA	GRM39COG***F50ZPT	
C274	CC 18PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0048.3622.00	MURATA	GRM39COG***F50ZPT	
C275	CC 27PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0010.9323.00	MURATA	GRM39COG***F50ZPT	
C276 ..278	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	AVX	1206 5C 104 KA 3	
C279	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C280	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C281 ..291	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	AVX	1206 5C 104 KA 3	
C292 ..295	CC 47PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4644.00	MURATA	GRM39COG***F50ZPT	
C296	CE 100UF+-20%35V RM5 ELECTROLYTIC CAPACITOR	0008.7510.00	PHILIPS_CO	2222 116 90042	
C297 ..301	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C302	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C303	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C304	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C305	CC 1,0PFO,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C306	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C307	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C308 ..310	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C311	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C312	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C313	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C314	CC 4,7PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39C0G***B50ZPT	
C315	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C316	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C317	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C318 ..324	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C325	CC 4,7PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.4538.00	MURATA	GRM39C0G***B50ZPT	
C326	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C327	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C328	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C329 ..332	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C333	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C334	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C335	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C336 ..339	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C340 ..343	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C344 ..346	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	SPRAGUE	293D 105 X9 010 D2T	
C347	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C348	CK 2,2UF+-5% 50V RD7,2H13 CAPACITOR	CK 0350.5944.00	SIEMENS	B32529-C5225-J089	
C349	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C350 ..359	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	SPRAGUE	293D 105 X9 010 D2T	
C360	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39C0G***B50ZPT	
C361	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39C0G***B50ZPT	
C362 ..364	CC 220PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4721.00	MURATA	GRM39C0G***F50ZPT	
C365	CC 56PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8809.00	MURATA	GRM42-6C0G 560F50ZPT	
C366 ..373	CC 150PF+-1% 50V NPO 0603 MD-CERAMIC-CAPACITOR	1051.4680.00	MURATA	GRM39C0G***F50ZPT	
C374	CC 680PF+-5% 50V HDK 0603 CERAMIK CAPACITOR	1093.6152.00	MURATA	GRM39X7R681J50PT	
C375	CC 1UF+-10% 50V X7R 2220 CERAMIC CAPACITOR	CC 0520.6873.00	AVX	2220 5C 105 KAT**A(F	
C376	CT 16PF KF-TRIMMER 1SEIT. CAPACITOR	0252.5634.00	VALVO	2238 809 05217	
C377	CT 16PF KF-TRIMMER 1SEIT. CAPACITOR	0252.5634.00	VALVO	2238 809 05217	
C378	CC 390PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8880.00	AVX	1206 5 A 391 F 3	
C379	CC 390PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8880.00	AVX	1206 5 A 391 F 3	
C380 ..400	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C401	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C402	CE 1UF +-10% 25V EIA3528 TANTALUM SMD-CAPACITOR	CE 0007.7217.00	SPRAGUE	293D 105 X9 025 B2T	
C403 ..419	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C420	CK 2,2UF+-5% 50V RD7,2H13 CAPACITOR	CK 0350.5944.00	SIEMENS	B32529-C5225-J089	
C421	CK 2,2UF+-5% 50V RD7,2H13 CAPACITOR	CK 0350.5944.00	SIEMENS	B32529-C5225-J089	
C422 ..441	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C442	CE 1UF +-10% 25V EIA3528 TANTALUM SMD-CAPACITOR	CE 0007.7217.00	SPRAGUE	293D 105 X9 025 B2T	
C443 ..446	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C447	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR NICHT BESTUECKT/NOT FITTED	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C448 ..478	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C479	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	AVX	1206 5C 104 KA 3	
C480 ..541	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C542 ..547	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C548	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C549	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C550	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	AVX	1206 5C 104 KA 3	
C551	CC 2,2NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4767.00	MURATA	GRM39X7R***K5C500PT*	
C552	CC 33NF+-10% 25V HDK 0603 CERAMIC CHIP CAPACITOR	1051.4697.00	AVX	CM105X7R333K25VAT	
C553 ..555	CC 2,2NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4767.00	MURATA	GRM39X7R***K5C500PT*	
C556	CC 82PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	1097.6363.00	MURATA	GRM39C0G***F50ZPT	
C557	CC 82PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	1097.6363.00	MURATA	GRM39C0G***F50ZPT	
C558 ..560	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C561	CE 4,7UF+-20%35V 7343 TANTALUM SMD-CAPACITOR	4016.4858.00	SPRAGUE	293D 475X0 035 D2T	
C562	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C563 ..574	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	SPRAGUE	293D 105 X9 010 D2T	
C575 ..581	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C582	CE 10UF+-20% 25V RM2,5 CAPACITOR	3528.5969.00	SANYO	25 SH 10 M	
C583	CE 100UF+-20% 20V RM5 CAPACITOR	3528.5975.00	SANYO	20 SH 100 M	
C584	CE 10UF+-20% 25V RM2,5 CAPACITOR	3528.5969.00	SANYO	25 SH 10 M	
C585 ..588	CC 120PF+-1% 50V NPO 0603 SMD-CERAMIC-CAPACITOR	1097.6411.00	MURATA	GRM39C0G***F50ZPT	
C589 ..591	CC 100PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4680.00	MURATA	GRM39C0G***F50ZPT	
C592 ..595	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C596	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C597	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C598 ..603	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
C604 ..609	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C610 ..615	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C616	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C617	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C618	CC 56PF+-1% 50VNPO 0603 SMD CERAMIK CAPACITOR	1093.6417.00	MURATA	GRM39C0G***F50ZPT	
C619	CC 56PF+-1% 50VNPO 0603 SMD CERAMIK CAPACITOR	1093.6417.00	MURATA	GRM39C0G***F50ZPT	
C620 ..633	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C634 ..636	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C637 ..661	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C662	CC 2,2NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4767.00	MURATA	GRM39X7R***K5C500PT*	
C663	CC 100PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4680.00	MURATA	GRM39C0G***F50ZPT	
C664	CE 100UF+-20% 20V RM5 CAPACITOR	3528.5975.00	SANYO	20 SH 100 M	
C665	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C666	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C667	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C668	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39C0G***B50ZPT	
C669	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C670	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C671	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C672	CE 100UF+-20% 20V RM5 CAPACITOR	3528.5975.00	SANYO	20 SH 100 M	
D1	BC X24164S8I-2.7 IC MEMORY	0048.4258.00	XICOR	X24164S G	
D2	BC EPM7128SQC100-7 EPLD IC PROG. LOGIC	1097.6240.00	ALTERA	EPM7128SQC100-7	
D3	BL 74LVT14DB 6XINV.SCHM 3.3V 6-INV SCHMITT-TRIGG.	0048.4335.00	PHILIPS_SE	(74)LVT14(DB)	
D4	BC EPF10K10TC-4 EPLD IC PROG LOGIC DEVICE	3530.3630.00	ALTERA	EPF10K10TC144-4	
D5	BL PC74HCT688T 8B.COMPAR. MAGNITUDE COMPARATOR	BL 0007.6762.00	PHILIPS_SE	(PC)74HCT688(D/T)	
D6	BC TNT4882 IEE488-CONTRL NUR F.SERV.ZWECKE STRAFE!	1050.0698.00	NATIONAL/I	TNT4882-AQ	
D7	BC EPF10K10TC-4 EPLD IC PROG LOGIC DEVICE	3530.3630.00	ALTERA	EPF10K10TC144-4	
D8	BL PC74HCT688T 8B.COMPAR. MAGNITUDE COMPARATOR	BL 0007.6762.00	PHILIPS_SE	(PC)74HCT688(D/T)	
D9	BL 74LVT574DB 8XD-FF 3S OCTAL D-TYPE FLIP-FLOP 3S	0048.3316.00	PHILIPS_SE	74LVT574DB	
D10	BC MB811641642A SDRAM IC MEMORY	0048.4193.00	FUJITSU_LI	MB811641642A-100FN	
D11	BL 74LVT16374A 16XD-FF 3S 16BIT D-TYPE FLIP-FLOP	0048.4093.00	PHILIPS_SE	(74)LVT16374A(DL)	
D12	BL 74LVT16374A 16XD-FF 3S 16BIT D-TYPE FLIP-FLOP	0048.4093.00	PHILIPS_SE	(74)LVT16374A(DL)	
D13	BL 74LVT16244BDL 16XBUFF OCTAL BUFFER	0048.3322.00	PHILIPS_SE	(74)LVT16244B(DL)	
D14	BL 74CBT16233 2X16 SWITCH 16-BIT BUS SWITCH	1110.3039.00	TEXAS	(SN74)CBT16233(DL)	
D15	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE	0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
D16	BL 74AC74SC 2XD-FLIPFL DUAL D-TYPE FLIPF	BL 0820.3602.00	NSC	74AC74(SC)	
D17	BL 74ABT16244ADL 16X3SBUF IC 16BIT 3ST BUFFER	2073.8027.00	TEXAS	SN74ABT16244ADL	
D18	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS_SE	(PC)74HC14(D/T)	
D19	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS_SE	(PC)74HC14(D/T)	
D20	BC MB811641642A SDRAM IC MEMORY	0048.4193.00	FUJITSU_LI	MB811641642A-100FN	
D21	BL 74LVT16374A 16XD-FF 3S 16BIT D-TYPE FLIP-FLOP	0048.4093.00	PHILIPS_SE	(74)LVT16374A(DL)	
D22	BL 74LVT16374A 16XD-FF 3S 16BIT D-TYPE FLIP-FLOP	0048.4093.00	PHILIPS_SE	(74)LVT16374A(DL)	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D23	BL 74LVT16244BDL 16XBUFF OCTAL BUFFER		0048.3322.00	PHILIPS_SE	(74)LVT16244B(DL)	
D24	BL 74CBT16233 2X16 SWITCH 16-BIT BUS SWITCH		1110.3039.00	TEXAS	(SN74)CBT16233(DL)	
D25	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE		0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
D26	BL 74LVT574DB 8XD-FF 3S OCTAL D-TYPE FLIP-FLOP 3S		0048.3316.00	PHILIPS_SE	74LVT574DB	
D27 ..29	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL	0007.4018.00	PHILIPS_SE	(PC)74HC14(D/T)	
D30 ..33	BL 74ABT574AD 8XD-FF 3S OCTAL D-TYPE FLIPFLOP		0009.8404.00	PHILIPS_SE	(74)ABT574A(D)	
D34	BL 74LVC86DB 4X2 EXOR EXOR GATE		1104.2586.00	PHILIPS_SE	74LVC86A(DB)	
D35 ..38	BL 74AC74SC 2XD-FLIPFL DUAL D-TYPE FLIPF	BL	0820.3602.00	NSC	74AC74(SC)	
D39	BL PC74HCT164T 8B.SH.REG. SHIFT REGISTER	BL	0007.6440.00	PHILIPS_SE	(PC)74HCT164(D/T)	
D40	BS DG419DY 1XUM ANALOGSCH ANALOG SWITCH		0746.0322.00	SILICONIX	DG419DY	
D41	BL 74ABT16244ADL 16X3SBUF IC 16BIT 3ST BUFFER		2073.8027.00	TEXAS	SN74ABT16244ADL	
D42 ..46	BL PC74HCT4094T 8ST.SHREG SHIFT REGISTER	BL	0007.6885.00	PHILIPS	(PC)74HCT4094(D)	
D47	BL 74AC74SC 2XD-FLIPFL DUAL D-TYPE FLIPF	BL	0820.3602.00	NSC	74AC74(SC)	
D48	BS DG408DY 8CH.ANAL.MUX IC 8 CH ANALOG MULTIPLEX		1036.4460.00	SILICONIX	DG408DY	
D49	BS DG408DY 8CH.ANAL.MUX IC 8 CH ANALOG MULTIPLEX		1036.4460.00	SILICONIX	DG408DY	
D50	:: AD9764 1GPK SR		1110.3197.00			
D51	:: AD9764 1GPK SR		1110.3197.00			
D52	BJ HI5741BIB 1X14B-DAC D/A CONVERTER 100MSPS		1110.3045.00	HARRIS	HI5741BIB	
D53	BJ HI5741BIB 1X14B-DAC D/A CONVERTER 100MSPS		1110.3045.00	HARRIS	HI5741BIB	
D54	BL PC74HCT165T 8B SHREG SHIFT REGISTER	BL	0007.5408.00	PHILIPS_SE	(PC)74HCT165(D/T)	
D55	BL 74ACT125SC 4XBUFFER 3S IC QUAD BUFFER 3-STATE	BL	2013.8620.00	NSC	74ACT125SC	
D56	BO AD835AR 250MHZ 4QMULTI 4-QUADRANT MULTIPLIER		1085.1632.00	ANALOG_DEV	AD835AR	
D57	BO AD835AR 250MHZ 4QMULTI 4-QUADRANT MULTIPLIER		1085.1632.00	ANALOG_DEV	AD835AR	
D58	BJ CS5507AS 1X16B.ADC IC ANALOG/DIGITAL CONV		1051.4280.00	CRYSTAL	CS5507-AS	
D59 ..62	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE		0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
D63	BO LT1117CSTLOWDROP+VREGL VOLTAGE REGULATOR		1036.4283.00	LINEAR_TEC	LT1117(CST)	
D64 ..67	BL PC74HC00T 4X2IN.NAND QUAD 2INPUT NAND GATE	BL	0007.3463.00	PHILIPS_SE	(PC)74HC00D(T)	
D68	BL PC74HCT138T LINE DECOD LINE DECODER	BL	0007.5120.00	PHILIPS_SE	(PC)74HCT138D(T)	
D69	BL PC74HCT138T LINE DECOD LINE DECODER	BL	0007.5120.00	PHILIPS_SE	(PC)74HCT138D(T)	
D70	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL	0007.4018.00	PHILIPS_SE	(PC)74HC14(D/T)	
D71	BL 74ACT139SC 2X 1A4DEMUX IC DUAL 1-OF-4 DEMUX	BL	2000.2412.00	HARRIS	CD74ACT139M	
D72	BL 74ACT139SC 2X 1A4DEMUX IC DUAL 1-OF-4 DEMUX	BL	2000.2412.00	HARRIS	CD74ACT139M	
D73	BL AD9850BRS DDS-SYNTH DDS SYNTHESIZER AD9850BRS		1110.3122.00	ANALOG_DEV	(AD)9850B(RS)	
D74 ..82	BJ DAC8143 1X12B-DAC 12B SERIAL D/A-CONVERTER		1012.9510.00	PMI	DAC8143FS	
D83	BO LT1117CSTLOWDROP+VREGL VOLTAGE REGULATOR		1036.4283.00	LINEAR_TEC	LT1117(CST)	
D84	BO LT1117CSTLOWDROP+VREGL VOLTAGE REGULATOR		1036.4283.00	LINEAR_TEC	LT1117(CST)	
D85	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE		0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
D86	BL 74ACT125SC 4XBUFFER 3S IC QUAD BUFFER 3-STATE	BL	2013.8620.00	NSC	74ACT125SC	
D87 ..89	BL PC74HCT4094T 8ST.SHREG SHIFT REGISTER	BL	0007.6885.00	PHILIPS	(PC)74HCT4094(D)	
D90	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE		0009.5792.00	PHILIPS_SE	(74)ABT125(D)	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D91	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE	0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
D92	BL PC74HCTOOT 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS_SE	(PC)74HCTOOD(T)	
D93	BL PC74HCT138T LINE DECOD LINE DECODER	BL 0007.5120.00	PHILIPS_SE	(PC)74HCT138D(T)	
D94	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS_SE	(PC)74HC14(D/T)	
D95	BL PC74HCTO8T 4X2IN ANDG AND GATE	BL 0007.6179.00	PHILIPS_SE	(PC)74HCT08(D/T)	
D96	BL PC74HCTO8T 4X2IN ANDG AND GATE	BL 0007.6179.00	PHILIPS_SE	(PC)74HCT08(D/T)	
D97 ..99	BL PC74HCT40103T PROG.CNT BINARY DOWN COUNTER	BL 0007.6956.00	PHILIPS	(PC)74HCT40103(T)	
D100	BJ DAC8143 1X12B-DAC 12B SERIAL D/A-CONVERTER	1012.9510.00	PMI	DAC8143FS	
D101	BL PC74HCTO4T 6XINVERT HEXINVERTER	BL 0007.5372.00	PHILIPS_SE	(PC)74HCT04(D/T)	
D102	BL 74ABT125 4X 3S BUFFER QUAD BUFFER 3-STATE	0009.5792.00	PHILIPS_SE	(74)ABT125(D)	
G2	EO 100,000MHZ QUARZOSZ CRYSTAL 100,000 MHZ	1110.3151.00	SEIKO	SG-615PCV-100	
G3	EO 100,000MHZ QUARZOSZ CRYSTAL 100,000 MHZ	1110.3151.00	SEIKO	SG-615PCV-100	
G4	EO 40,000MHZ QUARZOSZ QUARTZ CRYSTAL OSCILLATOR	1078.3133.00	SEIKO	SG 615 PH	
G7	BO REFO2CS VREF IC VOLTAGE REFERENCE	0009.6882.00	ANALOG_DEV	REFO2CS	
G8	EO JTOS200 100-200MHZ VCO VOLTAGE CONTR.OSCILLATOR	1110.3051.00	MINI-CIRCU	JTOS-200	
H1	AF HLMP1790 LED3 GN569N LED	0007.5250.00	QUALITY	HLMP-1790.(L32S)	
H2	AF HLMP1790 LED3 GN569N LED	0007.5250.00	QUALITY	HLMP-1790.(L32S)	
H3	AF HLMP1719 LED3 GE585N LED	0099.9140.00	QUALITY	HLMP-1719.L31S	
K1 ..17	SR 5V 500 OHM 1X1 SIL RELAY 5V SIL	1012.9604.00	HAMLIN	HE3621A0500	
K21 ..37	SR 5V 500 OHM 1X1 SIL RELAY 5V SIL	1012.9604.00	HAMLIN	HE3621A0500	
L1 ..8	LD 330NH 2% 2A OR065 CHOKE	LD 0567.4019.00	JAHRE	74.11-R330G	
L9	LD 33UH 40,25WDG Q7,5H12 COIL	6059.9831.00	NEOSID	0053 1319	
L10	LD 33UH 40,25WDG Q7,5H12 COIL	6059.9831.00	NEOSID	0053 1319	
L11 ..14	LD 15UH 2% 0,46A 1R2 CHOKE	LD 0282.9338.00	JAHRE	74.11-15R0G	
L15 ..24	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-J(K)100	
L25	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-J(K)100	
L26 ..33	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-J(K)100	
L34	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-J(K)100	
L35 ..51	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-J(K)100	
L54 ..62	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-J(K)100	
L63 ..76	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-J(K)100	
L77	LD 12UH 2% 0,49A 1R05 CHOKE	LD 0066.9806.00	JAHRE	74.11-12R0	
L78	LD 12UH 2% 0,49A 1R05 CHOKE	LD 0066.9806.00	JAHRE	74.11-12R0	
L79	LD 389NH 7,5W CM6P5 FE-K CHOKE	0303.9182.00	TOKO	301SS-0700	
L80	LD 389NH 7,5W CM6P5 FE-K CHOKE	0303.9182.00	TOKO	301SS-0700	
L81	LD SMD-DR.Z=625 OHM 50MHZ CHOKE	1078.3240.00	PHILIPS_CO	4330 030 41663	
L82	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-J(K)100	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
L83 ..90	LD SMD-DR.Z=625 OHM 50MHZ CHOKE	1078.3240.00	PHILIPS_CO	4330 030 41663	
L91	LD 47UH 10% 0,08A 1210 SMD-INDUCTOR	LD 0008.1693.00	SIEMENS	B82422-A1473-J(K)100	
L93 ..96	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-J(K)100	
N1	BO LT1084CP LOWDROP+VREGL IC VOLTAGE REGULATOR	2028.4955.00	LINEAR_TEC	LT1084CP	
N2	BL MC12093D 2/4/8 PRESC IC PROGR PRESCALER	1062.6438.00	MOTOROLA	12093(D)	
N3	BM MSA0386 DC-2.4G MMIC BROAD-BAND AMPLIFIER	0848.4461.00	AVANTEK	MSA0386	
N4	BO 79L05ACM-5V5%0A1VREGL VOLTAGE REGULATOR 5VDC	0851.6703.00	NSC	LM79L05ACM(X)	
N5	BO MC78L12A+12V5%0A1VREGL VOLTAGE REGULATOR	0350.9979.00	MOTOROLA	(MC)78L12(ACD)	
N6	BO LT1117CSTLOWDROP+VREGL VOLTAGE REGULATOR	1036.4283.00	LINEAR_TEC	LT1117(CST)	
N7 ..10	BO M78L05ACM+5V5%0A1 VREG VOLTAGE REGULATOR	0351.3451.00	NSC	LM78L05ACM	
N11	BO TL072ACD 2XFET OPAMP OPERATIONAL AMPLIFIER	0803.1057.00	TEXAS	TL 072 ACDR	
N12	BO NE5534AD LN OPAMP IC OPAMP	1011.5528.00	SIGNETICS	NE5534A(D)	
N13 ..18	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N19	BO OP297GS 2X PREC OPAMP IC DUALOPAMP	6071.9467.00	ANALOG_DEV	OP297GS	
N20	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N21	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N22	BO AD780AR 2V/53V0 VREF IC VOLTAGE REFERENCE	1081.0131.00	ANALOG_DEV	AD780AR	
N23 ..26	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N27	BO NE5534AD LN OPAMP IC OPAMP	1011.5528.00	SIGNETICS	NE5534A(D)	
N28 ..31	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N32	BO UA7905UC -5V1A0 VREGL VOLTAGE REGULATOR	BO 0282.5449.00	NSC	LM7905 CT	
N33 ..41	BO OP297GS 2X PREC OPAMP IC DUALOPAMP	6071.9467.00	ANALOG_DEV	OP297GS	
N43 ..45	BO OP97FS LP PREC OPAMP OPAMP	1036.4390.00	PMI	OP97F(S)	
N46 ..49	BO MAX4108ESA OPAMP OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
N50	BO UA7905UC -5V1A0 VREGL VOLTAGE REGULATOR	BO 0282.5449.00	NSC	LM7905 CT	
N51	BO UA7905UC -5V1A0 VREGL VOLTAGE REGULATOR	BO 0282.5449.00	NSC	LM7905 CT	
N52	BO LM340T + 5V1A0 VREGL VOLTAGE REGULATOR	BO 0336.4615.00	NSC	LM-340T5	
N53	BO LM340T + 5V1A0 VREGL VOLTAGE REGULATOR	BO 0336.4615.00	NSC	LM-340T5	
N54	BO NE5534D OPAMP OPERATIONAL AMPLIFIER	0815.7555.00	SIGNETICS	NE5534(D)	
N55	BO OP297GS 2X PREC OPAMP IC DUALOPAMP	6071.9467.00	ANALOG_DEV	OP297GS	
P1 ..32	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
P34 ..36	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
P56 ..58	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
P73 ..90	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
P92	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
P93	VL EINPRESSSTIFT 5,6 PIN	VL 0010.7250.00	AMP	1-928776-5	
R1 ..29	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R30	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R31	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R32	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R33	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R34	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R35	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R36 ..48	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R49	RG 200R +-1% TK200 SMD RESISTOR	0603	1097.6386.00	DRALORIC	CR 0603	
R50 ..52	RG 680R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6982.00	DRALORIC	CR 0603	
R53	RG 221 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5614.00	PHILIPS_CO	RC02	
R54 ..57	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R58 ..61	RG 22,1 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5489.00	PHILIPS_CO	RC02	
R62	RG 330R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6960.00	DRALORIC	CR 0603	
R63 ..65	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R66	RG 150R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6947.00	DRALORIC	CR 0603	
R67	RG 150R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6947.00	DRALORIC	CR 0603	
R68 ..71	RG 221 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5614.00	PHILIPS_CO	RC02	
R72 ..74	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R75	RG 68R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6930.00	DRALORIC	CR 0603	
R76	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R77	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R78 ..81	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R82	RG 2KO +-1% TK200 SMD RESISTOR	0603	1097.6328.00	DRALORIC	CR 0603	
R83 ..85	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R86	RG 75,0 OHM+-1%TK200 SMD RESISTOR	0603	0048.4906.00	DRALORIC	CR 0603	
R87	RG 75,0 OHM+-1%TK200 SMD RESISTOR	0603	0048.4906.00	DRALORIC	CR 0603	
R88	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R89	RG 75,0 OHM+-1%TK200 SMD RESISTOR	0603	0048.4906.00	DRALORIC	CR 0603	
R90	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R91	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R92	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R93	RG 75,0 OHM+-1%TK200 SMD RESISTOR	0603	0048.4906.00	DRALORIC	CR 0603	
R94 ..99	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R100	RG 2KO +-1% TK200 SMD RESISTOR	0603	1097.6328.00	DRALORIC	CR 0603	
R101	RG 221 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5614.00	PHILIPS_CO	RC02	
R102	RG 27,4KOH+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.7743.00	PHILIPS_CO	MPC 01	
R103 ..106	RG 475 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.8110.00	PHILIPS_CO	MPC 01	
R107	RG 27,4KOH+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.7743.00	PHILIPS_CO	MPC 01	
R108 ..111	RG 234 OHM+-0,1%TK25 RESISTOR	1206	0010.3990.00	PHILIPS_CO	MPC 01	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R112	RG 30,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5908.00	PHILIPS_CO	RC02	
R113	RG 30,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5908.00	PHILIPS_CO	RC02	
R114	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R115	RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5566.00	PHILIPS_CO	RC02	
R116	RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5566.00	PHILIPS_CO	RC02	
R117 ..130	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R131	RG 200 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5608.00	PHILIPS_CO	RC02	
R132	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R133	RG 1,5KOHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9975.00	PHILIPS_CO	MPC 01	
R134	RG 887 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9952.00	PHILIPS_CO	MPC 01	
R135	RG 1,5KOHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9975.00	PHILIPS_CO	MPC 01	
R136	RG 887 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9952.00	PHILIPS_CO	MPC 01	
R137 ..142	RG 200K +-1% TK200 0603 SMD RESISTOR	1093.6200.00	DRALORIC	CR 0603	
R143 ..148	RG 1,62KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9997.00	PHILIPS_CO	RC02	
R149 ..164	RG 75,0OHM+-0,1%TK25 1206 CHIP RESISTOR	2016.2252.00	PHILIPS_CO	MPC 01	
R165	RG 220R +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.6953.00	DRALORIC	CR 0603	
R166	RG 18,2KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7637.00	PHILIPS_CO	MPC 01	
R167	RG 18,2KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7637.00	PHILIPS_CO	MPC 01	
R168 ..171	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R172	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R173 ..178	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R179	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R180	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R181 ..221	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R222	RG 6K8 +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.7037.00	DRALORIC	CR 0603	
R223	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R224	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R225	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R226 ..238	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R239	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R240 ..258	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R259	RG 121 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8903.00	PHILIPS_CO	RC02	
R260	RG 121 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8903.00	PHILIPS_CO	RC02	
R261	RG 200 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5608.00	PHILIPS_CO	RC02	
R262	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	PHILIPS_CO	RC02	
R263 ..265	RG 470R +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.6976.00	DRALORIC	CR 0603	
R266 ..273	RG 200 OHM+-0,1%TK25 1206 CHIP RESISTOR	1110.3074.00	PHILIPS_CO	MPC 01	
R274 ..277	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R278	RG 39R 1% 1W 1218 SMD-RESISTOR	1104.2786.00	PHILIPS_CO	PRC201-39R 1% TK100	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R279	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R280	RG 20,0 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5472.00	PHILIPS_CO	RC02	
R281	RG 20,0 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5472.00	PHILIPS_CO	RC02	
R282	RG 20R 1% 1W SMD RESISTOR	1218	1104.2734.00	PHILIPS_CO	PRC201-20R 1% TK100	
R283	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R284	RG 20,0 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5472.00	PHILIPS_CO	RC02	
R285	RG 20,0 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5472.00	PHILIPS_CO	RC02	
R286	RG 1,0 KO +-0,1%TK25 SMD-RESISTOR	1206	0009.7595.00	PHILIPS_CO	MPC 01	
R287	RG 2K2 +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7008.00	DRALORIC	CR 0603	
R288 ..293	RG 20,0 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5472.00	PHILIPS_CO	RC02	
R294	RG 51,1 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.8810.00	PHILIPS_CO	RC02	
R295 ..314	RG 100 OHM+-0,1%TK25 SMD-RESISTOR	1206	0009.8033.00	PHILIPS_CO	MPC 01	
R315	RG 51,1 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.8810.00	PHILIPS_CO	RC02	
R316 ..331	RG 100 OHM+-0,1%TK25 SMD-RESISTOR	1206	0009.8033.00	PHILIPS_CO	MPC 01	
R332	RG 887 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9952.00	PHILIPS_CO	MPC 01	
R333	RG 887 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9952.00	PHILIPS_CO	MPC 01	
R334	RG 10,0 OHM+-1%TK100 CHIP -RESISTOR	1206	RG 0006.8649.00	PHILIPS_CO	RC02	
R335	RG 10,0 OHM+-1%TK100 CHIP -RESISTOR	1206	RG 0006.8649.00	PHILIPS_CO	RC02	
R336 ..341	RG 240 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	2035.3780.00	PHILIPS_CO	MPC 01	
R342	RG 392R+-1% TK200 SMD-RESISTOR EIA0603	0603	0010.9300.00	DRALORIC	CR 0603	
R343	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R344	RG 100,0KO+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0010.0655.00	PHILIPS_CO	MPC 01	
R345	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R346	RG 100,0KO+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0010.0655.00	PHILIPS_CO	MPC 01	
R347 ..349	RG 9,09KOHM+-1%TK100 CHIP RESISTOR	1206	RG 0007.0787.00	PHILIPS_CO	RC02	
R350	RG 137 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9252.00	PHILIPS_CO	MPC 01	
R351 ..355	RG 221 OHM+-0,1%TK25 CHIP RESISTOR	1206	1110.3080.00	PHILIPS_CO	MPC 01	
R356	RG 137 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9252.00	PHILIPS_CO	MPC 01	
R357 ..361	RG 221 OHM+-0,1%TK25 CHIP RESISTOR	1206	1110.3080.00	PHILIPS_CO	MPC 01	
R362	RG 330K +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7114.00	DRALORIC	CR 0603	
R363	RG 330K +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7114.00	DRALORIC	CR 0603	
R364 ..393	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R394	RG 0-OHM WIDERSTAND RESISTOR CHIP 0-OHM	1206	RG 0007.5108.00	DRALORIC	CR 1206	
R395	RG 150 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.8091.00	PHILIPS_CO	MPC 01	
R396	RG 0-OHM WIDERSTAND RESISTOR CHIP 0-OHM	1206	RG 0007.5108.00	DRALORIC	CR 1206	
R397	RG 0-OHM WIDERSTAND RESISTOR CHIP 0-OHM	1206	RG 0007.5108.00	DRALORIC	CR 1206	
R398	RG 150 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.8091.00	PHILIPS_CO	MPC 01	
R399	RG 0-OHM WIDERSTAND RESISTOR CHIP 0-OHM	1206	RG 0007.5108.00	DRALORIC	CR 1206	
R400	RG 825 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9930.00	PHILIPS_CO	MPC 01	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R401	RG 825 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9930.00	PHILIPS_CO	MPC 01	
R402	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R403	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R404	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R405	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R406 ..409	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R410	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R411	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R412	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R413	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R414	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R415	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R416	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R417	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R418	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R419 ..421	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R422 ..425	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R426	RG 0-OHM WIDERSTAND 0603 0-OHM RESISTOR EIA0603	0009.9369.00	PHILIPS_CO	RC21 0 OHM	
R427	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R428	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R429	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R430	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R431	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R432	RG 118 OHM+-0,1%TK25 1206 RESISTOR	0010.3977.00	PHILIPS_CO	MPC 01	
R433 ..436	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R437	RG 0-OHM WIDERSTAND 0603 0-OHM RESISTOR EIA0603	0009.9369.00	PHILIPS_CO	RC21 0 OHM	
R438 ..441	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R442	RG 475 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8110.00	PHILIPS_CO	MPC 01	
R443 ..445	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R446	RG 118 OHM+-0,1%TK25 1206 RESISTOR	0010.3977.00	PHILIPS_CO	MPC 01	
R447 ..450	RG 150 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.8091.00	PHILIPS_CO	MPC 01	
R451	RG 2K2 +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.7008.00	DRALORIC	CR 0603	
R452	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	PHILIPS_CO	RC02	
R453	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	PHILIPS_CO	RC02	
R454	RG 470K +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.7120.00	DRALORIC	CR 0603	
R455 ..458	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	
R459	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R460	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R461	RG 301 OHM+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0009.9269.00	PHILIPS_CO	MPC 01	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R462	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R463	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R464 ..468	RG 301 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.9269.00	PHILIPS_CO	MPC 01	
R469	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R470	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R471	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R472	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R473	RG 10,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R474 ..476	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R477	RG 301 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9123.00	DRALORIC	CR 0603	
R478 ..480	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R481	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R482	RG 2,OKOHM+-0,1%TK25 SMD-RESISTOR	1206	0009.7608.00	PHILIPS_CO	MPC 01	
R483	RG 2,OKOHM+-0,1%TK25 SMD-RESISTOR	1206	0009.7608.00	PHILIPS_CO	MPC 01	
R484 ..489	RG 2KO +-1% TK200 SMD RESISTOR	0603	1097.6328.00	DRALORIC	CR 0603	
R490	RG 150 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.8091.00	PHILIPS_CO	MPC 01	
R491	RG 150 OHM+-0,1%TK25 SMD-RESISTOR EIA1206	1206	0009.8091.00	PHILIPS_CO	MPC 01	
R492	RG 51,1 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.8810.00	PHILIPS_CO	RC02	
R493	RG 51,1 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.8810.00	PHILIPS_CO	RC02	
R494	RG 1,0 KO +-1%TK100 CHIP RESISTOR	1206	RG 0006.7271.00	PHILIPS_CO	RC02	
R495 ..527	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R528	RG 27,4 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9046.00	DRALORIC	CR 0603	
R529	RG 27,4 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9046.00	DRALORIC	CR 0603	
R530 ..535	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R536 ..538	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R539	RG 2KO +-1% TK200 SMD RESISTOR	0603	1097.6328.00	DRALORIC	CR 0603	
R540	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R541	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R542	RG 301 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9123.00	DRALORIC	CR 0603	
R543	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R544	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R545	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R546	RG 1K21 +-1% TK200 SMD-REGISTER	0603	0010.9817.00	DRALORIC	CR 0603	
R547	RG 4K7 +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7020.00	DRALORIC	CR 0603	
R548	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R549	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R550	RG 1K21 +-1% TK200 SMD-REGISTER	0603	0010.9817.00	DRALORIC	CR 0603	
R551	RG 4K7 +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7020.00	DRALORIC	CR 0603	
R552 ..557	RG 20,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7643.00	PHILIPS_CO	MPC 01	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R558	RG 619 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.9074.00	PHILIPS_CO	RC02	
R559	RG 619 OHM+-1%TK100 CHIP RESISTOR	1206	RG 0006.9074.00	PHILIPS_CO	RC02	
R560 ..563	RG 274 OHM+-0,1%TK25 CHIP RESISTOR	1206	1110.3097.00	PHILIPS_CO	MPC 01	
R564	RG 4K7 +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7020.00	DRALORIC	CR 0603	
R565	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R566	RG 274 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5637.00	PHILIPS_CO	RC02	
R567	RG 274 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5637.00	PHILIPS_CO	RC02	
R568	RG 2K2 +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.7008.00	DRALORIC	CR 0603	
R569	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R570	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R571	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R572	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R573	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R574	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R575	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R576	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R577	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R578	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R579	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R580	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R581	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R582	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R583	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R584	RG 1KO +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5340.00	DRALORIC	CR 0603	
R585	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R586	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R587	RG 10,0 OHM+-1%TK100 CHIP -RESISTOR	1206	RG 0006.8649.00	PHILIPS_CO	RC02	
R588 ..592	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R593	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R594	RG 51,0 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9030.00	DRALORIC	CR 0603	
R595	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R596	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R597	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R598	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R599	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R600	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R601	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R602	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R603	RG 10,0KOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R604 ..608	RG 10,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7666.00	PHILIPS_CO	MPC 01	
R609 ..611	RG 20,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7643.00	PHILIPS_CO	MPC 01	
R612 ..616	RG 10,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7666.00	PHILIPS_CO	MPC 01	
R617 ..619	RG 20,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7643.00	PHILIPS_CO	MPC 01	
R620 ..622	RG 10,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7666.00	PHILIPS_CO	MPC 01	
R623	RG 18K2+-1% TK200 0603 SMD-RESISTOR EIA0603	0010.9317.00	DRALORIC	CR 0603	
R624	RG 18K2+-1% TK200 0603 SMD-RESISTOR EIA0603	0010.9317.00	DRALORIC	CR 0603	
R625	RG 21,5KOH+-0,1%TK25 1206 RESISTOR	0010.2929.00	PHILIPS_CO	MPC 01	
R626	RG 21,5KOH+-0,1%TK25 1206 RESISTOR	0010.2929.00	PHILIPS_CO	MPC 01	
R627	RG 49,9KOH+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0010.0649.00	PHILIPS_CO	MPC 01	
R628	RG 49,9KOH+-0,1%TK25 1206 SMD-RESISTOR EIA1206	0010.0649.00	PHILIPS_CO	MPC 01	
R629	RG 10,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7666.00	PHILIPS_CO	MPC 01	
R630	RG 20,0KOH+-0,1%TK25 1206 SMD-RESISTOR	0009.7643.00	PHILIPS_CO	MPC 01	
R631	RG 33K +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.7066.00	DRALORIC	CR 0603	
R632	RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5520.00	PHILIPS_CO	RC02	
R633	RG 5K11 +-1% TK200 0603 SMD RESISTOR	1097.6334.00	DRALORIC	CR 0603	
R634	RG 5K11 +-1% TK200 0603 SMD RESISTOR	1097.6334.00	DRALORIC	CR 0603	
R635	RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5520.00	PHILIPS_CO	RC02	
R636	RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5520.00	PHILIPS_CO	RC02	
R637	RG 100K +-1% TK200 0603 SMD RESISTOR	RG 0009.5363.00	DRALORIC	CR 0603	
R638	RG 100K +-1% TK200 0603 SMD RESISTOR	RG 0009.5363.00	DRALORIC	CR 0603	
R639	RG 15K +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.7043.00	DRALORIC	CR 0603	
R640	RG 100K +-1% TK200 0603 SMD RESISTOR	RG 0009.5363.00	DRALORIC	CR 0603	
R641	RG 100K +-1% TK200 0603 SMD RESISTOR	RG 0009.5363.00	DRALORIC	CR 0603	
R642 ..644	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	PHILIPS_CO	RC02	
R645	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R646	RG 100K +-1% TK200 0603 SMD RESISTOR	RG 0009.5363.00	DRALORIC	CR 0603	
R647	RG 24,3 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.8991.00	DRALORIC	CR 0603	
R648	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	PHILIPS_CO	RC02	
R649	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	PHILIPS_CO	RC02	
R650	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R651	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	PHILIPS_CO	RC02	
R652	RG 270R +-1% TK200 0603 SMD-RESISTOR EIA0603 270R	0010.9581.00	DRALORIC	CR 0603	
R653	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R654	RG 39R 1% 1W 1218 SMD-RESISTOR	1104.2786.00	PHILIPS_CO	PRC201-39R 1% TK100	
R655 ..658	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R659	RG 5R6 1% 1W 1218 SMD RESISTOR	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R660	RG 5R6 1% 1W 1218 SMD RESISTOR	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R661 ..663	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	

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Kennz. Comp. No.	Benennung Designation		Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R664	RL 0,4OW 10,OKOHM+-1%TK50 RESISTOR		RL 0092.1567.00	DRALORIC	SMA0204	
R665	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R666	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R667 ..670	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R671	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R672	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R673 ..677	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R678 ..680	RG 10R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5328.00	DRALORIC	CR 0603	
R681	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R682	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R683	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R684	RG 301 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9123.00	DRALORIC	CR 0603	
R685	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R686	RG 5R6 1% 1W SMD RESISTOR	1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
R687	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R688	RG 10,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R689	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R690	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R691	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R692	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R693	RG 100K +-1% TK200 SMD RESISTOR	0603	RG 0009.5363.00	DRALORIC	CR 0603	
R694	RG 10,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R695	RG 10,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R696	RG 100,OKOH+-1%TK100 CHIP RESISTOR	1206	RG 0007.1948.00	PHILIPS_CO	RC02	
R697	RG 100,OKOH+-1%TK100 CHIP RESISTOR	1206	RG 0007.1948.00	PHILIPS_CO	RC02	
R698 ..701	RG 0-OHM WIDERSTAND RESISTOR CHIP 0-OHM	1206	RG 0007.5108.00	DRALORIC	CR 1206	
R702	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R703	RG 100R +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5334.00	DRALORIC	CR 0603	
R704	RG 301 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.9123.00	DRALORIC	CR 0603	
R705	RG 470R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6976.00	DRALORIC	CR 0603	
R706	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R707	RG 1,0 KO +-0,1%TK25 SMD-RESISTOR	1206	0009.7595.00	PHILIPS_CO	MPC 01	
R708	RG 10,OKOH+-0,1%TK25 SMD-RESISTOR	1206	0009.7666.00	PHILIPS_CO	MPC 01	
R709	RG 22,1 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5489.00	PHILIPS_CO	RC02	
R710	RG 2,43KOH+-0,1%TK25 RESISTOR	1206	0010.1974.00	PHILIPS_CO	MPC 01	
R711	RG 33,2 OHM+-1%TK100 RESISTOR CHIP	1206	RG 0007.5520.00	PHILIPS_CO	RC02	
R712 ..722	RG 10K +-1% TK200 SMD-RESISTOR EIA0603	0603	RG 0009.5357.00	DRALORIC	CR 0603	
R723	RG 470R +-1% TK200 SMD-RESISTOR EIA0603	0603	0009.6976.00	DRALORIC	CR 0603	
R724	RG 24,3 OHM+-1%TK200 SMD-RESISTOR EIA0603	0603	0009.8991.00	DRALORIC	CR 0603	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R725	RG 27,4 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9046.00	DRALORIC	CR 0603	
R726	RG 27,4 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9046.00	DRALORIC	CR 0603	
R727	RG 51,0 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9030.00	DRALORIC	CR 0603	
R729	RG 27,4 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9046.00	DRALORIC	CR 0603	
R730	RG 27,4 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9046.00	DRALORIC	CR 0603	
R731	RG 20R 1% 1W 1218 SMD RESISTOR	1104.2734.00	PHILIPS_CO	PRC201-20R 1% TK100	
R732	RG 20R 1% 1W 1218 SMD RESISTOR	1104.2734.00	PHILIPS_CO	PRC201-20R 1% TK100	
R733	RG 7K5 +-1% TK200 0603 SMD-RESISTOR EIA0603	0010.8440.00	DRALORIC	CR 0603	
R734	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R735	RG 75,0 OHM+-1%TK200 0603 SMD RESISTOR	0048.4906.00	DRALORIC	CR 0603	
R736	RG 75,0 OHM+-1%TK200 0603 SMD RESISTOR	0048.4906.00	DRALORIC	CR 0603	
R737	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R738	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R739	RG 22,1 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5489.00	PHILIPS_CO	RC02	
R740	RG 22,1 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5489.00	PHILIPS_CO	RC02	
R741	RG 27,4 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9046.00	DRALORIC	CR 0603	
R742	RG 2,43KOH+-0,1%TK25 1206 RESISTOR	0010.1974.00	PHILIPS_CO	MPC 01	
R743	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R744	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R745	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R746	RG 200R +-1% TK200 0603 SMD RESISTOR	1097.6386.00	DRALORIC	CR 0603	
R747	RG 680R +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.6982.00	DRALORIC	CR 0603	
R748	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R749	RG 10R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5328.00	DRALORIC	CR 0603	
R750	RG 680R +-1% TK200 0603 SMD-RESISTOR EIA0603	0009.6982.00	DRALORIC	CR 0603	
R751	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R753	RG 100R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5334.00	DRALORIC	CR 0603	
R754	RG 20K +-1% TK200 0603 SMD-RESISTOR EIA0603	0010.9100.00	DRALORIC	CR 0603	
R755	RG 20K +-1% TK200 0603 SMD-RESISTOR EIA0603	0010.9100.00	DRALORIC	CR 0603	
R756	RS 0,25W 50 OHM+-20% SMD POTENTIOMETER	RS 0007.9578.00	BI_TECHNOL	23 B R... TR	
R757	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R758	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R759	RG 10K +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5357.00	DRALORIC	CR 0603	
R760	RG 10R +-1% TK200 0603 SMD-RESISTOR EIA0603	RG 0009.5328.00	DRALORIC	CR 0603	
R7288	RG 51,0 OHM+-1%TK200 0603 SMD-RESISTOR EIA0603	0009.9030.00	DRALORIC	CR 0603	
T1	LU HF-UEBERTR.200MHZ SMD RF-TRANSFORMER	1051.5187.00	MINI-CIRCU	T1-1T-KK TR	
U1 ..3	BO LM339D 4X COMPAR COMPARATOR	BO 0007.3757.00	SIGNETICS	LM-339D	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
V1	AD BAV99 75V DUO UDI	AD 0911.0092.00	VALVO	BAV99	
..7	HIGH-SPEED DOUBLE DIODE				
V8	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V10	AK BSV52 N 12V 100MA	AK 0007.3434.00	PHILIPS	BSV52	
	TRANSISTOR				
V11	AE BZX284-B10 0,4W ZDI	0048.3551.00	PHILIPS_SE	BZX284-B10	
	ZENER DIODE				
V12	BO LT1004CS-1.2 VREF	0857.9879.00	LINEAR_TEC	LT1004CS8-1.2	
	BANDGAP REF 1.2V				
V13	AD BAV99 75V DUO UDI	AD 0911.0092.00	VALVO	BAV99	
..21	HIGH-SPEED DOUBLE DIODE				
V22	AE BZX284-B6V8 0,4W ZDI	0048.3545.00	PHILIPS_SE	BZX284-B6V8	
	ZENER DIODE				
V23	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
..44	HIGHSPEED SWITCHING DIODE				
V45	AE BZX284-B10 0,4W ZDI	0048.3551.00	PHILIPS_SE	BZX284-B10	
	ZENER DIODE				
V46	AE SM6T6V8A 6,8V SUPPR	0009.8733.00	SGS-THOMSO	SM6T6V8A	
..50	SUPPRESSOR DIODE				
V51	AE BZX284-B5V1 0,4W ZDI	0048.3516.00	PHILIPS_SE	BZX284-B5V1	
	ZENER DIODE				
V52	AE BZX284-B2V7 0,4W ZDI	0048.3345.00	PHILIPS_SE	BZX284-B2V7	
	ZENER DIODE				
V53	AE BZX284-B2V7 0,4W ZDI	0048.3345.00	PHILIPS_SE	BZX284-B2V7	
	ZENER DIODE				
V54	AK BFP183 N 12V 65MA	6075.5650.00	SIEMENS	BFP183 (RHS)	
	TRANSISTOR				
V55	AK BCX71J P 45V 200MA	AK 0007.2096.00	VALVO	BCX71J GEGURTET	
	TRANSISTOR				
V56	AK BCX71J P 45V 200MA	AK 0007.2096.00	VALVO	BCX71J GEGURTET	
	TRANSISTOR				
V57	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V58	AD BAV70 70V DUO UDI	0007.9278.00	PHILIPS	BAV70	
..65	DUAL DIODE COMMON CATHODE				
V66	AE HSMS2805 1+1 SCHOTTKY	1002.4974.00	HEWLETT_PA	HSMS2805 L31	
	SCHOTTKY DIODE PAIR				
V67	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V68	AE SM6T6V8A 6,8V SUPPR	0009.8733.00	SGS-THOMSO	SM6T6V8A	
	SUPPRESSOR DIODE				
V69	AE BZX284-B8V2 0,4W ZDI	0048.4306.00	PHILIPS_SE	BZX284-B8V2	
	ZENER DIODE				
V70	AE BZX284-B10 0,4W ZDI	0048.3551.00	PHILIPS_SE	BZX284-B10	
	ZENER DIODE				
V71	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V72	AE BB147 92-2,8P VHF-CDI	0048.5160.00	PHILIPS_SE	BB147	
	VHF VARIABLE CAPACITANCE				
V73	AE BB147 92-2,8P VHF-CDI	0048.5160.00	PHILIPS_SE	BB147	
	VHF VARIABLE CAPACITANCE				
V74	AE BB147 92-2,8P VHF-CDI	0048.5160.00	PHILIPS_SE	BB147	
	VHF VARIABLE CAPACITANCE				
V75	AE BB147 92-2,8P VHF-CDI	0048.5160.00	PHILIPS_SE	BB147	
	VHF VARIABLE CAPACITANCE				
V76	AE BZX284-B10 0,4W ZDI	0048.3551.00	PHILIPS_SE	BZX284-B10	
	ZENER DIODE				
V77	AD BAV99 75V DUO UDI	AD 0911.0092.00	VALVO	BAV99	
	HIGH-SPEED DOUBLE DIODE				
V78	AD BAV99 75V DUO UDI	AD 0911.0092.00	VALVO	BAV99	
	HIGH-SPEED DOUBLE DIODE				
V79	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V80	AD BAS216 75V UDI	0010.9346.00	PHILIPS_SE	BAS216	
	HIGHSPEED SWITCHING DIODE				
V81	AD BAV99 75V DUO UDI	AD 0911.0092.00	VALVO	BAV99	
	HIGH-SPEED DOUBLE DIODE				
W30	DY FLACHBANDKABEL	1110.2855.00			
X1	FJ EINBAUSTECKER F.GS SMB	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
	PLUG				
X2	FP STECKERLEISTE 10P.GER	FP 0815.7603.00	J_S_T_DEUT	B10P-VH-B	
	CONNECTOR 10POL.				
X3	FP STIFTLEISTE 8P.R2,54	FP 0009.6182.00			
	PIN CONNECTOR				

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
X4	FP STIFTLEISTE 8P.R2,54 PIN CONNECTOR	FP 0009.6182.00			
X5 ..9	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X10	FP STECKERLEISTE 26P.WIN CONNECTOR 26P	FP 0099.9405.00	BERG_ELEKT	71922-126	
X11 ..13	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X14	FP E-PRESS STIFTLEI.4P 2R CONNECTOR	0048.4812.00			
X15 ..19	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X20	FP STECKERLEISTE 26P.WIN CONNECTOR 26P	FP 0099.9405.00	BERG_ELEKT	71922-126	
X21	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X22	FP E-PRESS STIFTLEI.4P 2R CONNECTOR	0048.4812.00			
X23	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X24	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X25	FP STIFTLEISTE 20P.2REIH. CONNECTOR 20P.	FP 0520.6521.00	BINDER	11-0209-00-20	
X26	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X27	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X28	FP E-PRESS STIFTLEISTE 2P CONNECTOR	0048.4706.00			
X29	FP E-PRESS STIFTL.10P. 2R CONNECTOR	0048.4970.00			
X30	FP STECKERLEISTE 10POL. FP CONNECTOR10P	FP 6040.4611.00			
X31	FP E-PRESS STIFTL.10P. 2R CONNECTOR	0048.4970.00			
X32	FP E-PRESS STIFTL.10P. 2R CONNECTOR	0048.4970.00			
X50 ..53	FP E-PRESS STIFTLEISTE 3P CONNECTOR	0048.4712.00			
X60	FP STECKERLEISTE 40P.GER CONNECTOR	FP 0624.1419.00	BERG_ELEKT	71918-140	
X61	FP STECKERLEISTE 2P.GER CONNECTOR 2POL.	FP 0815.7584.00	J_S_T_DEUT	B2P-VH-B	
X63	FP BUCHSENLEISTE 50P.R=2 CONNECTOR 50P	FP 4037.2125.00	BERG_ELEKT	87173-150	
X100 ..104	FJ WINKELEINBAUBUCHSE BNC ANGLE BNC	FJ 1051.4380.00	AMP	227677-1 +2X1-329631	
X105	FP STECKERLEISTE 26P.WIN CONNECTOR 26P	FP 0099.9405.00	BERG_ELEKT	71922-126	
X106	FM STECKERLEISTE 9P.WINK CONNECTOR 9POL	FM 4036.4818.00	FCT	F09P5G1-K407	
X107 ..109	FJ WINKELEINBAUBUCHSE BNC ANGLE BNC	FJ 1051.4380.00	AMP	227677-1 +2X1-329631	
X111	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X112	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X115 ..118	FJ WINKELEINBAUBUCHSE BNC ANGLE BNC	FJ 1051.4380.00	AMP	227677-1 +2X1-329631	
X123	FP E-PRESS STIFTLEISTE 2P CONNECTOR	0048.4706.00			
X124	FP E-PRESS STIFTLEISTE 2P CONNECTOR	0048.4706.00			
X133	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X134	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	

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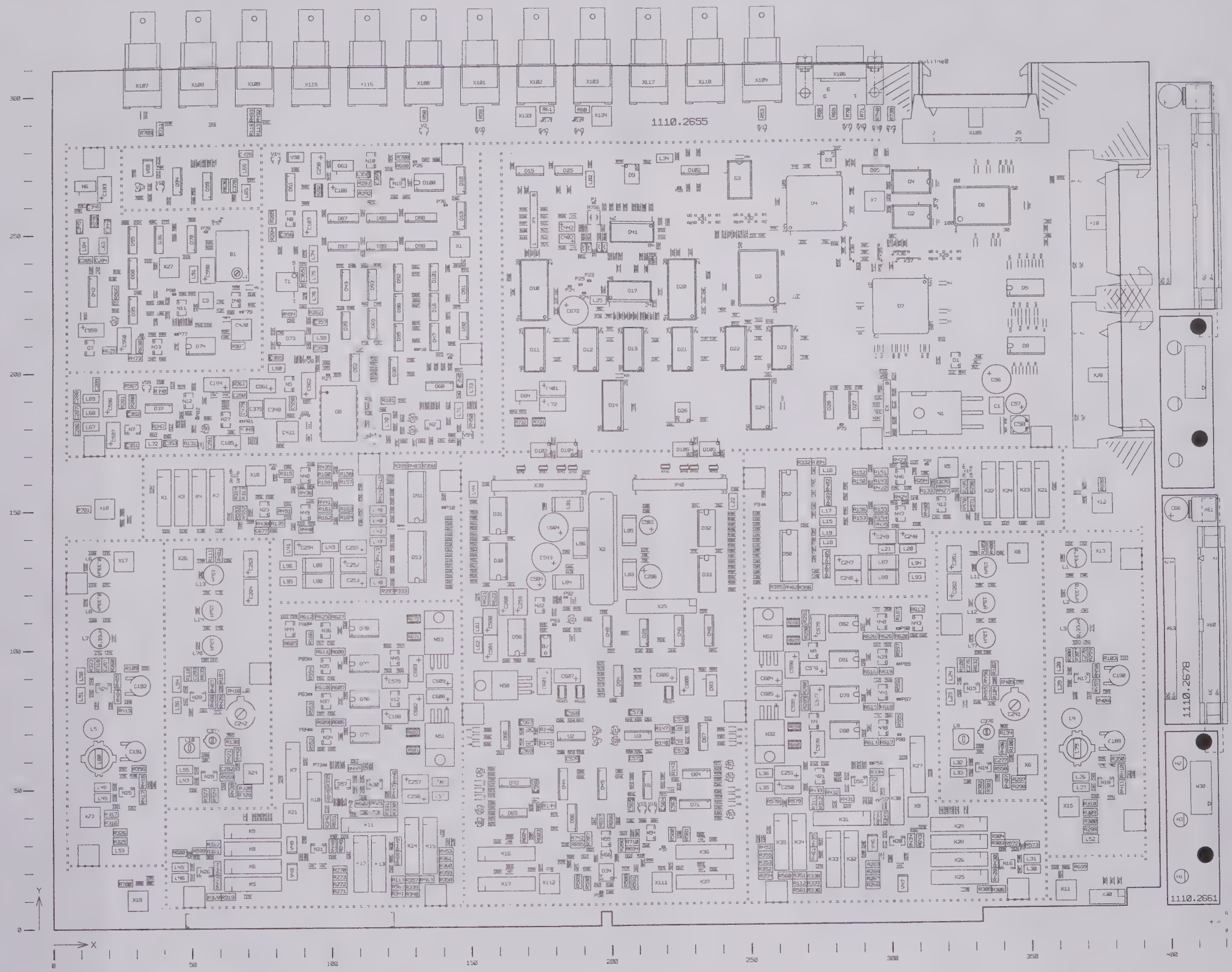


DARSTELLUNG SEITE B
VIEW ON SIDE B

ACHTUNG: EGBI
ELEKTROSTATISCH GEFÄHRDETE BAUELEMENTE SIND MIT EINEM BESONDERE KENNZEICHNUNG.
ATTENTION ESDI
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL MARKING

*ENDENDE ANGABEN UEBER VARIANTEN,
*TRIMMWERTE, BAUTEILWERTE UND
*NICHT BESTUECKTE BAUTEILE SIEHE SA.

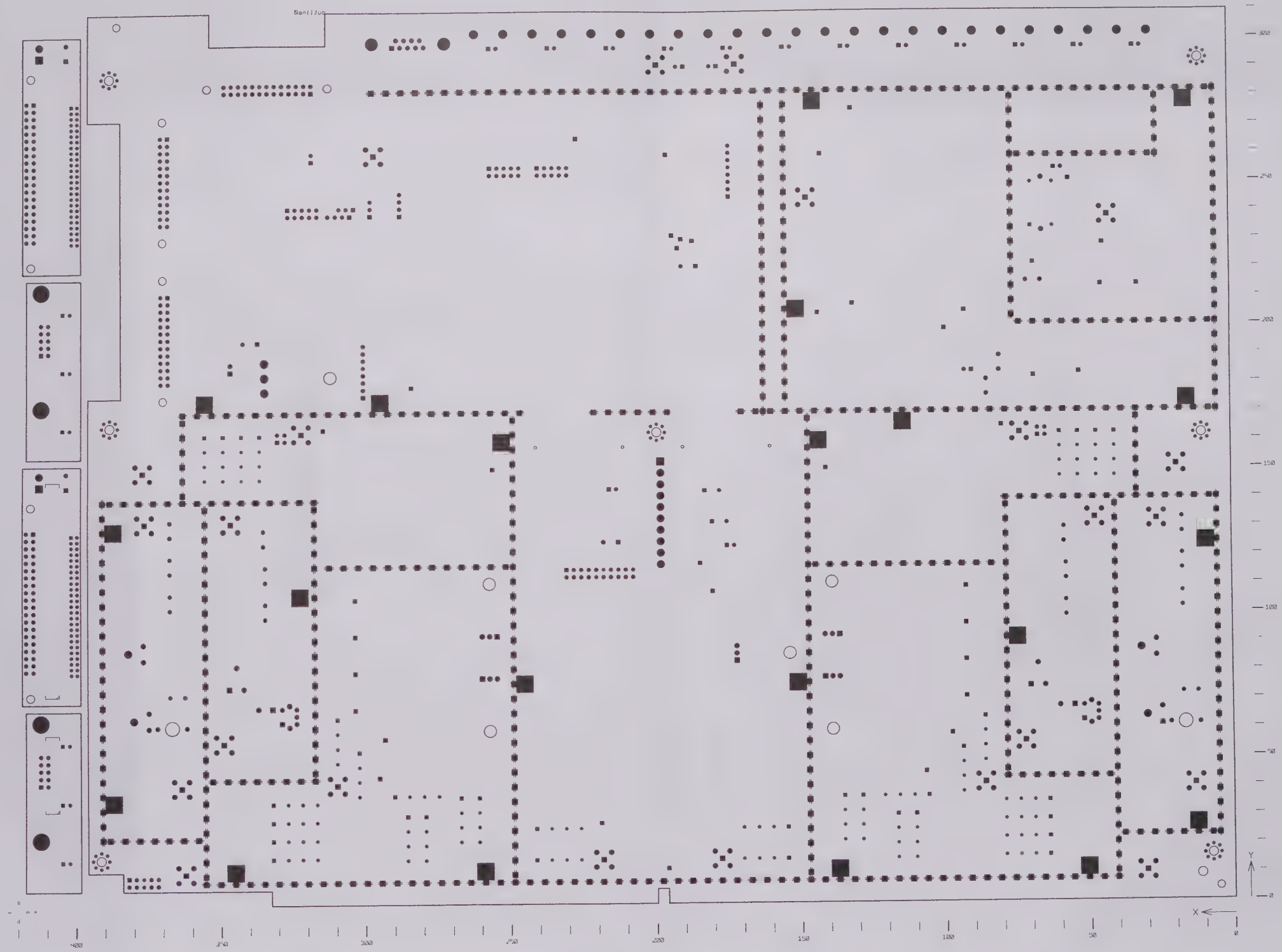
FOR ENDDIG. INFORMATION ON MODELS,
*TRIMMING AND COMPONENTS VALUES AND
*UNFITTED COMPONENTS SEE PARTS LIST.

06.00			IGPK	DATUM	NAME
			BEARB.		SR
			GEPR.		SR
			NORM		
			PLOTT	99-02-11	SCHRAIGE
AEND. IND.	AENDERUNGS MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ	

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT

ZEICHN.-NR.
1110.2532.01 D

ERSTE V. 1110.2003 | ERSTE Z. 1110 2003



DARSTELLUNG SEITE A
VIEW ON SIDE A

BEHALTEN WIR UNS ALLE RECHTE VOR

ACHTUNG: ESD!
ATTENTION: ESD!

		OPR. DATUM	NAME
		BEARB.	SR
		GEPR.	SR
		NORM	
		PLOTT 99-02-11	SCHWAIGE
ÄNDG. NR.	ÄNDERUNGS MITTEILUNG	DATUM	NAME

ROHDE&SCHWARZ

BENENNUNG
IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT

ZEICHN.-NR. 1110.2532.01 D
BLATT-NR. 2
REG.I.V. 1110.2003
ERSTE Z. 1110.2003

ROHDE&SCHWARZ

XY-Liste

XY List

Erklärung der Spaltenbezeichnungen:

el. Kennz.	Bauelement-Kennzeichen
Seite	Leiterplatten-Seite, auf der sich das Bauelement befindet
X/Y	Koordinaten (in Millimeter) des Bauelementes auf der Leiterplatte bezogen auf den Nullpunkt
Planq., Bl.	Planquadrat und Seite des Schaltbildes für das jeweilige Bauelement

Explanation of column designations:

Part	Identification of instrument part
Side	Side of the PC board on which instrument part is positioned
X/Y	Coordinates (in units of millimeters) of the component on the PC board in reference to zero point
Sqr, Pg	Square and page of the diagram for the respective instrument part

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
B1	B	69	234	5B	19
B2	B	176	103	5B	27
C1	B	340	188	2F	6
C2	B	318	251	3D	7
C3	B	56	229	3B	19
C4	B	321	216	2E	7
C5	B	290	213	2E	7
C6	B	307	206	2E	7
C7	B	321	220	3E	7
C8	B	302	237	3E	7
C9	B	290	222	3E	7
C10	B	255	248	3E	7
C11	B	269	225	4E	7
C12	B	243	229	4E	7
C13	B	252	248	4E	7
C14	B	254	217	4E	7
C15	B	345	215	1F	7
C16	B	323	197	5F	7
C17	B	284	279	1F	7
C18	B	218	210	4E	8
C19	B	210	187	5E	8
C20	B	218	203	4E	8
C21	B	183	211	2E	8
C22	B	183	203	2E	8
C23	B	184	211	3E	8
C24	B	202	203	3E	8
C25	B	200	211	3E	8
C26	B	182	227	1E	8
C27	B	182	226	2E	8
C28	B	166	229	2E	8
C29	B	182	222	1E	8
C30	B	166	273	3F	28
C31	B	255	211	3E	9
C32	B	238	211	3E	9
C33	B	255	203	3E	9
C34	B	236	211	2E	9
C35	B	236	203	2E	9
C36	B	272	210	3E	9
C37	B	263	187	5E	9
C38	B	272	203	4E	9
C39	B	180	273	3F	28
C40	B	235	227	1E	9
C41	B	235	226	1E	9
C42	B	220	229	2E	9
C43	B	235	222	2E	9
C44	B	318	265	3C	11
C45	B	333	244	1D	11
C46	B	351	259	1D	11
C47	B	333	272	1D	11
C48	B	288	256	2E	28
C49	B	272	272	1E	28
C50	B	288	264	1E	28
C51	B	279	245	2E	28
C52	B	262	259	2E	28
C53	B	271	245	2E	28
C54	B	345	236	4F	28
C55	B	249	276	2C	28
C56	B	337	195	2F	6
C57	B	347	185	3F	6
C58	B	345	178	3F	6
C59	B	358	245	2D	7
C60	B	358	250	2C	7
C61	B	225	177	4E	9
C62	B	241	150	1F	12
C63	B	241	134	1E	12
C64	B	155	139	1F	15
C65	B	155	123	1E	15
C66	B	404	145	2C	29
C67	B	130	269	2D	21
C68	B	55	191	3B	20
C69	B	64	178	3C	20
C70	B	337	78	5D	13
C71	B	60	78	5D	16
C72	B	176	184	1F	10
C73	B	204	237	3E	10
C74	B	373	105	3C	13
C75	B	377	55	6C	13
C76	B	26	55	6C	16
C77	B	22	105	3C	16
C78	B	45	210	3C	19
C79	B	104	82	6C	26
C80	B	104	69	6D	26
C81	B	104	95	6B	26
C82	B	104	107	6A	26
C83	B	293	82	2C	26
C84	B	293	69	2D	26
C85	B	293	95	2B	26
C86	B	293	107	2A	26
C87	B	330	115	3D	13
C88	B	53	115	3D	16
C89	B	333	108	3E	13
C90	B	333	121	3E	13
C91	B	57	121	3E	16
C92	B	57	108	3E	16
C93	B	333	61	6E	13
C94	B	56	61	6E	16
C95	B	213	131	2D	6
C96	B	213	133	3D	6
C97	B	329	146	7D	12
C98	B	347	27	8A	13
C99	B	262	44	3D	14
C100	B	225	33	8D	14
C101	B	208	37	4E	14
C102	B	210	34	3E	14
C103	B	199	12	8E	14
C104	B	68	145	7D	15
C105	B	49	27	8A	16
C106	B	112	41	3D	17
C107	B	171	33	8D	17
C108	B	37	219	2B	19
C109	B	64	213	4A	19
C110	B	72	228	5B	19
C111	B	37	228	2A	19
C112	B	43	181	2B	20
C113	B	44	195	2A	20
C114	B	74	175	3B	20
C115	B	152	188	7B	20
C116	B	337	143	2C	23
C117	B	332	145	2B	23
C118	B	314	54	3C	23
C119	B	306	59	3B	23
C120	B	42	290	2B	18
C121	B	324	39	4C	23
C122	B	210	98	2F	27
C123	B	349	143	3C	23
C124	B	327	39	5B	23
C125	B	322	39	5C	23
C126	B	344	59	5D	13
C127	B	343	143	5C	23
C128	B	53	143	5B	23
C129	B	67	59	5D	16
C130	B	74	39	5B	23
C131	B	69	39	5A	23
C132	B	47	143	3B	23
C133	B	308	156	6A	12
C134	B	72	39	4B	23
C135	B	309	165	6B	12
C136	B	109	41	8A	23
C137	B	98	43	7B	23
C138	B	117	41	8B	23
C139	B	311	143	6C	12
C140	B	309	152	6C	12
C141	B	298	41	7C	23
C142	B	280	42	8C	23
C143	B	371	81	4C	13
C144	B	91	59	3A	23
C145	B	82	54	3B	23
C146	B	64	147	2A	23
C147	B	60	143	2B	23
C148	B	290	27	5B	24
C149	B	275	20	6C	24
C150	B	290	25	5C	24
C151	B	380	44	6C	13
C152	B	257	33	8B	24
C153	B	253	30	7C	24
C154	B	255	31	8C	24
C155	B	338	52	6E	13
C156	B	332	79	4E	13
C157	B	142	31	8A	24
C158	B	144	30	7A	24
C159	B	140	33	8A	24
C160	B	366	80	5C	13
C161	B	106	25	5A	24
C162	B	121	20	6A	24
C163	B	373	44	6C	13
C164	B	354	143	6A	25
C165	B	360	157	6A	25
C166	B	327	11	7A	25
C167	B	318	39	7A	25
C168	B	327	50	6D	13
C169	B	320	39	8A	25
C170	B	76	39	8D	25
C171	B	327	77	5D	13
C172	B	78	39	7D	25
C173	B	69	11	7C	25
C174	B	36	157	6C	25
C175	B	42	143	6D	25
C176	B	153	119	5D	27
C177	B	213	135	3D	6
C178	B	91	228	8A	21
C179	B	181	131	2E	6
C180	B	213	149	2E	6
C181	B	213	150	3E	6
C182	B	181	130	3E	6
C183	B	19	263	2F	18
C184	B	63	196	3E	20
C185	B	67	175	3F	20
C186	B	101	265	1F	22
C187	B	93	250	5E	21
C188	B	120	76	1E	26
C189	B	380	64	6C	13
C190	B	382	88	4B	13
C191	B	30	64	6C	16
C192	B	32	87	4B	16
C193	B	254	138	3B	12
C194	B	254	140	3B	12
C195	B	254	142	3B	12
C196	B	254	144	3A	12
C197	B	254	145	3A	12
C198	B	254	147	3A	12
C199	B	254	136	3B	12
C200	B	254	134	3B	12
C201	B	254	132	3C	12
C202	B	254	130	3C	12
C203	B	254	128	3C	12
C204	B	254	126	3D	12
C205	B	254	124	3D	12
C206	B	254	123	3D	12
C207	B	274	155	4B	12
C208	B	274	132	4C	12
C209	B	338	87	4D	13
C210	B	359	19	5A	13
C211	B	369	154	1A	13
C212	B	369	135	2C	13
C213	B	385	94	4B	13
C214	B	224	20	8C	14
C215	B	142	147	3D	15
C216	B	142	145	3D	15
C217	B	142	143	3D	15
C218	B	142	141	3C	15
C219	B	142	139	3C	15
C220	B	142	137	3C	15

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ROHDE & SCHWARZ

Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT

Sprache: *Lang.:* de

Blatt: *Sh.:* 1 +

Aei: *C.I.:* 05.06

Typ: *Type:* AMIQ

Datum: *Date:* 98–10–16

Abteilung: *Dpt:* 1GPK

Name: *Name:* SR

Sachnr.: *Part No.:* 1110.2532.01 XY

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C221	B	142	135	3B	15
C222	B	142	133	3B	15
C223	B	142	122	3A	15
C224	B	142	124	3A	15
C225	B	142	126	3A	15
C226	B	142	128	3B	15
C227	B	142	130	3B	15
C228	B	142	131	3B	15
C229	B	123	131	4B	15
C230	B	123	155	4C	15
C231	B	28	147	1A	16
C232	B	34	18	5A	16
C233	B	19	135	2C	16
C234	B	34	94	4B	16
C235	B	61	87	4D	16
C236	B	172	20	8C	17
C237	B	208	32	8C	14
C238	B	184	29	8D	17
C239	B	236	20	6E	24
C240	B	213	29	3E	14
C241	B	347	75	4D	13
C242	B	70	75	4C	16
C243	B	270	143	2C	12
C244	B	126	144	2C	15
C245	B	52	223	3B	19
C246	B	289	124	3E	12
C247	B	282	129	2E	12
C248	B	305	138	6D	12
C249	B	295	138	6E	12
C250	B	260	49	1E	14
C251	B	267	54	1F	14
C252	B	105	130	3E	15
C253	B	112	124	2E	15
C254	B	89	137	6D	15
C255	B	112	137	6E	15
C256	B	134	47	1E	17
C257	B	127	52	1F	17
C258	B	97	278	2F	22
C259	B	168	113	4D	27
C260	B	163	113	5D	27
C261	B	324	127	2E	13
C262	B	324	117	2F	13
C263	B	72	127	1E	16
C264	B	72	117	1F	16
C265	B	294	162	5A	12
C266	B	294	149	5C	12
C267	B	363	118	3C	13
C268	B	102	159	5A	15
C269	B	102	147	5C	15
C270	B	12	118	3C	16
C271	B	77	290	7B	22
C272	B	92	239	7A	21
C273	B	330	102	3D	13
C274	B	53	102	3D	16
C275	B	91	243	7A	21
C276	B	328	94	4D	13
C277	B	341	58	6D	13
C278	B	370	97	4C	13
C279	B	305	24	4B	14
C280	B	300	22	4B	14
C281	B	19	97	4C	16
C282	B	64	57	6D	16
C283	B	51	93	4D	16
C284	B	16	241	1F	18
C285	B	10	241	1E	18
C286	B	9	182	1D	20
C287	B	9	188	1D	20
C288	B	9	190	1C	20
C289	B	16	195	2C	20
C290	B	66	192	3E	20
C291	B	57	173	3E	20
C292	B	366	135	2C	13
C293	B	370	100	3C	13
C294	B	20	99	3C	16
C295	B	15	135	2C	16
C296	B	213	125	2D	6
C297	B	294	158	5B	12
C298	B	306	164	6A	12
C299	B	306	151	6B	12
C300	B	294	145	5C	12
C301	B	314	161	7B	12
C302	B	84	166	6A	15
C303	B	335	97	4E	13
C304	B	87	158	6B	15
C305	B	347	86	4D	13
C306	B	340	132	2E	13
C307	B	87	145	6C	15
C308	B	363	131	2C	13
C309	B	366	124	3C	13
C310	B	366	111	3C	13
C311	B	84	152	6C	15
C312	B	55	78	4E	16
C313	B	368	100	4C	13
C314	B	385	53	6B	13
C315	B	377	82	4B	13
C316	B	61	52	6E	16
C317	B	29	44	6C	16
C318	B	281	53	2D	14
C319	B	285	42	2D	14
C320	B	102	164	5B	15
C321	B	90	159	6A	15
C322	B	81	163	7B	15
C323	B	91	145	6B	15
C324	B	102	151	5C	15
C325	B	35	53	6B	16
C326	B	63	132	2E	16
C327	B	70	85	4D	16
C328	B	21	81	4C	16
C329	B	15	124	3C	16
C330	B	15	111	3C	16
C331	B	17	99	4C	16
C332	B	12	131	2C	16
C333	B	16	80	5C	16
C334	B	22	44	6B	16
C335	B	58	97	4E	16
C336	B	50	50	6D	16
C337	B	50	77	5D	16
C338	B	91	26	4B	17
C339	B	100	25	4B	17
C340	B	27	82	4B	16
C341	B	112	57	2D	17
C342	B	108	60	2D	17
C343	B	86	218	6A	21
C344	B	20	255	1F	18
C345	B	10	252	1E	18
C346	B	14	260	3F	18
C347	B	291	105	2E	26
C348	B	81	189	3B	20
C349	B	291	93	2E	26
C350	B	147	195	4E	20
C351	B	28	174	1F	20
C352	B	28	185	1F	20
C353	B	41	175	4E	20
C354	B	99	208	7E	21
C355	B	80	205	6E	21
C356	B	83	250	5E	21
C357	B	95	218	6B	21
C358	B	115	271	2F	22
C359	B	118	272	2F	22
C360	B	331	128	2D	13
C361	B	54	128	2D	16
C362	B	88	243	7A	21
C363	B	92	224	8A	21
C364	B	92	231	8A	21
C365	B	91	237	7A	21
C366	B	336	121	2E	13
C367	B	336	108	3E	13
C368	B	369	124	2C	13
C369	B	369	111	3C	13
C370	B	19	111	3C	16
C371	B	19	124	2C	16
C372	B	60	121	2E	16
C373	B	60	108	3E	16
C374	B	72	269	6B	18
C375	B	74	190	3B	20
C376	B	332	68	6E	13
C377	B	55	68	6E	16
C378	B	66	266	6B	18
C379	B	69	279	7B	18
C380	B	208	166	2F	6
C381	B	194	273	3F	28
C382	B	181	147	2E	6
C383	B	274	162	4B	12
C384	B	274	126	4C	12
C385	B	274	147	1F	12
C386	B	274	159	2F	12
C387	B	274	151	2F	12
C388	B	274	138	2F	12
C389	B	274	141	3F	12
C390	B	310	163	6D	12
C391	B	302	156	6E	12
C392	B	310	150	6D	12
C393	B	302	142	6E	12
C394	B	318	145	7E	12
C395	B	325	153	7D	12
C396	B	274	124	4C	12
C397	B	274	135	4C	12
C398	B	241	154	1E	12
C399	B	325	81	4E	13
C400	B	325	86	4F	13
C401	B	176	191	2F	10
C402	B	188	247	6B	10
C403	B	373	51	2F	13
C404	B	373	47	2E	13
C405	B	364	89	3F	13
C406	B	364	84	3E	13
C407	B	346	19	4F	13
C408	B	346	23	4E	13
C409	B	329	56	3F	13
C410	B	329	53	3E	13
C411	B	284	52	2F	14
C412	B	284	48	2E	14
C413	B	298	27	2E	14
C414	B	298	31	2F	14
C415	B	272	57	2E	14
C416	B	276	57	2F	14
C417	B	297	74	3E	26
C418	B	297	87	3E	26
C419	B	194	15	4F	14
C420	B	71	215	4B	19
C421	B	85	181	4C	20
C422	B	84	161	6D	15
C423	B	84	147	6D	15
C424	B	72	149	7D	15
C425	B	123	125	4B	15
C426	B	123	162	4C	15
C427	B	123	160	4C	15
C428	B	78	155	7E	15
C429	B	94	153	6E	15
C430	B	94	167	6E	15
C431	B	123	146	3F	15
C432	B	123	149	2F	15
C433	B	123	128	2F	15
C434	B	123	136	2F	15
C435	B	123	139	2F	15
C436	B	155	159	1E	15
C437	B	123	152	4C	15
C438	B	22	47	4E	16
C439	B	50	23	4E	16
C440	B	52	52	2E	16
C441	B	48	81	2E	16
C442	B	184	251	6B	10

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Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C443	B	14	84	3E	16
C444	B	50	19	4F	16
C445	B	22	50	4F	16
C446	B	14	89	3F	16
C447	B	216	241	2A	10
C448	B	48	85	3F	16
C449	B	52	56	2F	16
C450	B	109	54	2E	17
C451	B	111	53	3F	17
C452	B	100	102	3E	26
C453	B	90	31	2F	17
C454	B	109	50	2F	17
C455	B	111	49	3E	17
C456	B	100	90	4E	26
C457	B	89	26	2E	17
C458	B	225	166	4E	18
C459	B	216	166	4E	18
C460	B	202	81	5E	18
C461	B	147	250	4E	18
C462	B	147	262	3E	18
C463	B	51	263	6B	18
C464	B	40	274	3A	18
C465	B	17	237	4F	19
C466	B	53	217	5F	19
C467	B	35	205	1F	19
C468	B	37	214	1E	19
C469	B	30	229	3F	19
C470	B	66	231	1E	19
C471	B	44	218	2F	19
C472	B	48	219	2E	19
C473	B	42	255	3F	19
C474	B	30	255	4F	19
C475	B	50	242	4F	19
C476	B	60	225	1F	19
C477	B	34	241	3F	19
C478	B	57	217	3C	19
C479	B	69	188	3C	20
C480	B	119	186	5B	20
C481	B	127	189	5B	20
C482	B	125	263	1E	21
C483	B	147	192	5F	20
C484	B	137	175	4F	20
C485	B	41	177	4F	20
C486	B	129	204	3F	21
C487	B	112	208	4F	21
C488	B	118	224	4F	21
C489	B	107	223	4F	21
C490	B	108	238	5F	21
C491	B	80	215	6E	21
C492	B	93	209	6E	21
C493	B	93	215	7E	21
C494	B	80	209	6E	21
C495	B	213	240	3E	10
C496	B	207	259	2E	10
C497	B	205	240	3E	10
C498	B	214	259	3E	10
C499	B	88	273	8E	22
C500	B	189	55	3E	23
C501	B	238	50	2E	23
C502	B	238	42	3E	23
C503	B	202	55	3F	24
C504	B	219	54	5F	24
C505	B	208	53	5E	24
C506	B	158	44	4F	24
C507	B	158	53	4F	24
C508	B	183	62	3E	25
C509	B	182	74	3F	25
C510	B	213	74	2E	25
C511	B	215	62	3F	25
C512	B	235	74	3E	25
C513	B	161	62	2E	25
C514	B	126	101	4F	26
C515	B	121	92	5E	26
C516	B	85	112	4E	26
C517	B	96	102	4F	26
C518	B	291	80	3E	26
C519	B	300	87	3F	26
C520	B	300	112	3F	26
C521	B	297	112	3E	26
C522	B	300	100	3F	26
C523	B	297	100	3E	26
C524	B	300	74	2F	26
C525	B	291	67	2E	26
C526	B	100	77	2E	26
C527	B	96	77	2F	26
C528	B	105	109	2E	26
C529	B	88	112	2F	26
C530	B	105	97	1E	26
C531	B	96	90	1F	26
C532	B	96	64	1F	26
C533	B	100	64	1E	26
C534	B	164	95	5E	27
C535	B	184	106	3A	27
C536	B	184	114	3B	27
C537	B	200	98	4F	27
C538	B	197	112	3F	27
C539	B	234	112	3F	27
C540	B	224	98	2F	27
C541	B	237	98	3F	27
C542	B	291	45	2C	14
C543	B	289	56	1D	14
C544	B	209	21	7D	14
C545	B	102	46	1D	17
C546	B	102	58	2D	17
C547	B	187	22	7D	14
C548	B	59	290	7A	18
C549	B	33	294	2B	18
C550	B	87	190	4C	20
C551	B	140	175	6D	20
C552	B	62	187	3B	20
C553	B	114	182	5C	20
C554	B	121	176	6C	20
C555	B	133	188	6D	20
C556	B	377	58	5C	13
C557	B	26	58	6C	16
C558	B	57	233	5B	19
C559	B	11	216	1C	19
C560	B	26	209	2C	19
C561	B	80	195	3A	20
C562	B	93	192	4A	20
C563	B	223	45	4C	24
C564	B	219	41	2C	24
C565	B	208	45	2B	24
C566	B	173	48	4B	24
C567	B	168	73	4D	25
C568	B	185	76	2D	25
C569	B	168	63	4D	25
C570	B	228	74	4B	25
C571	B	211	60	2B	25
C572	B	228	62	4A	25
C573	B	208	76	2B	25
C574	B	188	60	2D	25
C575	B	275	103	5E	26
C576	B	276	91	6E	26
C577	B	274	84	6E	26
C578	B	274	61	7E	26
C579	B	120	88	1E	26
C580	B	157	106	4E	27
C581	B	157	96	4F	27
C582	B	216	144	2E	6
C583	B	181	140	2E	6
C584	B	179	125	2E	6
C585	B	333	97	3E	13
C586	B	332	132	2E	13
C587	B	56	97	3E	16
C588	B	55	132	2E	16
C589	B	333	63	6E	13
C590	B	56	62	6E	16
C591	B	100	201	5B	21
C592	B	105	84	4E	26
C593	B	105	71	5E	26
C594	B	312	103	4E	26
C595	B	309	103	4F	26
C596	B	21	186	2D	20
C597	B	22	174	2D	20
C598	B	265	96	4E	12
C599	B	265	82	4F	12
C600	B	228	84	4D	12
C601	B	177	91	4E	12
C602	B	131	82	4F	15
C603	B	131	96	4E	15
C604	B	261	88	4E	12
C605	B	261	83	4F	12
C606	B	223	90	5D	12
C607	B	188	90	4E	12
C608	B	142	83	5F	15
C609	B	142	88	5E	15
C610	B	181	116	3C	27
C611	B	180	113	3C	27
C612	B	207	25	6C	14
C613	B	204	33	5F	17
C614	B	192	27	4E	17
C615	B	190	25	6D	17
C616	B	203	37	7D	14
C617	B	194	37	7D	17
C618	B	197	248	6A	10
C619	B	194	247	6B	10
C620	B	211	237	4E	10
C621	B	196	243	7B	10
C622	B	215	275	4F	28
C623	B	302	266	5F	28
C624	B	324	155	7C	12
C625	B	321	145	7C	12
C626	B	213	218	4E	10
C627	B	199	229	3E	10
C628	B	339	26	7A	13
C629	B	345	26	7A	13
C630	B	72	146	7C	15
C631	B	76	155	7C	15
C632	B	52	26	7A	16
C633	B	56	26	7A	16
C634	B	160	20	6E	24
C635	B	236	30	8E	24
C636	B	160	30	7E	24
C637	B	270	57	3D	14
C638	B	270	50	3D	14
C639	B	120	48	3D	17
C640	B	111	47	3D	17
C641	B	180	35	3F	24
C642	B	123	278	1F	21
C643	B	43	263	5B	18
C644	B	91	189	4A	20
C645	B	51	194	2E	20
C646	B	47	184	2F	20
C647	B	136	276	2F	21
C648	B	145	210	7E	22
C649	B	147	223	8E	22
C650	B	118	238	3F	22
C651	B	131	237	8E	22
C652	B	98	256	4F	22
C653	B	126	256	5F	22
C654	B	112	256	5E	22
C655	B	98	246	5E	22
C656	B	126	246	6E	22
C657	B	112	246	6E	22
C658	B	143	215	4F	22
C659	B	143	227	4F	22
C660	B	131	227	7E	22
C661	B	131	215	7E	22
C662	B	133	175	6C	20
C663	B	143	177	6C	20
C664	B	182	154	2F	6

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ROHDE & SCHWARZ

Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT

Sprache: *Lang.:* de

Blatt: *Sh.:* 3 +

Aei: *C.I.:* 05.06

Typ: *Type:* AMIQ

Datum: *Date:* 98–10–16

Abteilung: *Dpt:* 1GPK

Name: *Name:* SR

Sachnr.: *Part No.:* 1110.2532.01 XY

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C443	B	14	84	3E	16
C444	B	50	19	4F	16
C445	B	22	50	4F	16
C446	B	14	89	3F	16
C447	B	216	241	2A	10
C448	B	48	85	3F	16
C449	B	52	56	2F	16
C450	B	109	54	2E	17
C451	B	111	53	3F	17
C452	B	100	102	3E	26
C453	B	90	31	2F	17
C454	B	109	50	2F	17
C455	B	111	49	3E	17
C456	B	100	90	4E	26
C457	B	89	26	2E	17
C458	B	225	166	4E	18
C459	B	216	166	4E	18
C460	B	202	81	5E	18
C461	B	147	250	4E	18
C462	B	147	262	3E	18
C463	B	51	263	6B	18
C464	B	40	274	3A	18
C465	B	17	237	4F	19
C466	B	53	217	5F	19
C467	B	35	205	1F	19
C468	B	37	214	1E	19
C469	B	30	229	3F	19
C470	B	66	231	1E	19
C471	B	44	218	2F	19
C472	B	48	219	2E	19
C473	B	42	255	3F	19
C474	B	30	255	4F	19
C475	B	50	242	4F	19
C476	B	60	225	1F	19
C477	B	34	241	3F	19
C478	B	57	217	3C	19
C479	B	69	188	3C	20
C480	B	119	186	5B	20
C481	B	127	189	5B	20
C482	B	125	263	1E	21
C483	B	147	192	5F	20
C484	B	137	175	4F	20
C485	B	41	177	4F	20
C486	B	129	204	3F	21
C487	B	112	208	4F	21
C488	B	118	224	4F	21
C489	B	107	223	4F	21
C490	B	108	238	5F	21
C491	B	80	215	6E	21
C492	B	93	209	6E	21
C493	B	93	215	7E	21
C494	B	80	209	6E	21
C495	B	213	240	3E	10
C496	B	207	259	2E	10
C497	B	205	240	3E	10
C498	B	214	259	3E	10
C499	B	88	273	8E	22
C500	B	189	55	3E	23
C501	B	238	50	2E	23
C502	B	238	42	3E	23
C503	B	202	55	3F	24
C504	B	219	54	5F	24
C505	B	208	53	5E	24
C506	B	158	44	4F	24
C507	B	158	53	4F	24
C508	B	183	62	3E	25
C509	B	182	74	3F	25
C510	B	213	74	2E	25
C511	B	215	62	3F	25
C512	B	235	74	3E	25
C513	B	161	62	2E	25
C514	B	126	101	4F	26
C515	B	121	92	5E	26
C516	B	85	112	4E	26

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C517	B	96	102	4F	26
C518	B	291	80	3E	26
C519	B	300	87	3F	26
C520	B	300	112	3F	26
C521	B	297	112	3E	26
C522	B	300	100	3F	26
C523	B	297	100	3E	26
C524	B	300	74	2F	26
C525	B	291	67	2E	26
C526	B	100	77	2E	26
C527	B	96	77	2F	26
C528	B	105	109	2E	26
C529	B	88	112	2F	26
C530	B	105	97	1E	26
C531	B	96	90	1F	26
C532	B	96	64	1F	26
C533	B	100	64	1E	26
C534	B	164	95	5E	27
C535	B	184	106	3A	27
C536	B	184	114	3B	27
C537	B	200	98	4F	27
C538	B	197	112	3F	27
C539	B	234	112	3F	27
C540	B	224	98	2F	27
C541	B	237	98	3F	27
C542	B	291	45	2C	14
C543	B	289	56	1D	14
C544	B	209	21	7D	14
C545	B	102	46	1D	17
C546	B	102	58	2D	17
C547	B	187	22	7D	14
C548	B	59	290	7A	18
C549	B	33	294	2B	18
C550	B	87	190	4C	20
C551	B	140	175	6D	20
C552	B	62	187	3B	20
C553	B	114	182	5C	20
C554	B	121	176	6C	20
C555	B	133	188	6D	20
C556	B	377	58	5C	13
C557	B	26	58	6C	16
C558	B	57	233	5B	19
C559	B	11	216	1C	19
C560	B	26	209	2C	19
C561	B	80	195	3A	20
C562	B	93	192	4A	20
C563	B	223	45	4C	24
C564	B	219	41	2C	24
C565	B	208	45	2B	24
C566	B	173	48	4B	24
C567	B	168	73	4D	25
C568	B	185	76	2D	25
C569	B	168	63	4D	25
C570	B	228	74	4B	25
C571	B	211	60	2B	25
C572	B	228	62	4A	25
C573	B	208	76	2B	25
C574	B	188	60	2D	25
C575	B	275	103	5E	26
C576	B	276	91	6E	26
C577	B	274	84	6E	26
C578	B	274	61	7E	26
C579	B	120	88	1E	26
C580	B	157	106	4E	27
C581	B	157	96	4F	27
C582	B	216	144	2E	6
C583	B	181	140	2E	6
C584	B	179	125	2E	6
C585	B	333	97	3E	13
C586	B	332	132	2E	13
C587	B	56	97	3E	16
C588	B	55	132	2E	16
C589	B	333	63	6E	13
C590	B	56	62	6E	16

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C591	B	100	201	5B	21
C592	B	105	84	4E	26
C593	B	105	71	5E	26
C594	B	312	103	4E	26
C595	B	309	103	4F	26
C596	B	21	186	2D	20
C597	B	22	174	2D	20
C598	B	265	96	4E	12
C599	B	265	82	4F	12
C600	B	228	84	4D	12
C601	B	177	91	4E	12
C602	B	131	82	4F	15
C603	B	131	96	4E	15
C604	B	261	88	4E	12
C605	B	261	83	4F	12
C606	B	223	90	5D	12
C607	B	188	90	4E	12
C608	B	142	83	5F	15
C609	B	142	88	5E	15
C610	B	181	116	3C	27
C611	B	180	113	3C	27
C612	B	207	25	6C	14
C613	B	204	33	5F	17
C614	B	192	27	4E	17
C615	B	190	25	6D	17
C616	B	203	37	7D	14
C617	B	194	37	7D	17
C618	B	197	248	6A	10
C619	B	194	247	6B	10
C620	B	211	237	4E	10
C621	B	196	243	7B	10
C622	B	215	275	4F	28
C623	B	302	266	5F	28
C624	B	324	155	7C	12
C625	B	321	145	7C	12
C626	B	213	218	4E	10
C627	B	199	229	3E	10
C628	B	339	26	7A	13
C629	B	345	26	7A	13
C630	B	72	146	7C	15
C631	B	76	155	7C	15
C632	B	52	26	7A	16
C633	B	56	26	7A	16
C634	B	160	20	6E	24
C635	B	236	30	8E	24
C636	B	160	30	7E	24
C637	B	270	57	3D	14
C638	B	270	50	3D	14
C639	B	120	48	3D	17
C640	B	111	47	3D	17
C641	B	180	35	3F	24
C642	B	123	278	1F	21
C643	B	43	263	5B	18
C644	B	91	189	4A	20
C645	B	51	194	2E	20
C646	B	47	184	2F	20
C647	B	136	276	2F	21
C648	B	145	210	7E	22
C649	B	147	223	8E	22
C650	B	118	238	3F	22
C651	B	131	237	8E	22
C652	B	98	256	4F	22
C653	B	126	256	5F	22
C654	B	112	256	5E	22
C655	B	98	246	5E	22
C656	B	126	246	6E	22
C657	B	112	246	6E	22
C658	B	143	215	4F	22
C659	B	143	227	4F	22
C660	B	131	227	7E	22
C661	B	131	215	7E	22
C662	B	133	175	6C	20
C663	B	143	177	6C	20
C664	B	182	154	2F	6

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ROHDE & SCHWARZ

Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT
IQ ANALOG/DIGITAL UNIT

Sprache: *Lang.:* de

Blatt: *Sh.:* 3 +

Aei: *C.I.:* 05.06

Typ: *Type:* AMIQ

Datum: *Date:* 98–10–16

Abteilung: *Dpt:* 1GPK

Name: *Name:* SR

Sachnr.: *Part No.:* **1110.2532.01 XY**

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C665	B	226	276	5F	10
C666	B	143	238	3F	22
C667	B	244	120	1D	12
C668	B	152	152	1D	15
C669	B	361	267	1A	7
C670	B	302	262	3C	7
C671				1A	10
C672				2E	8
D1	B	328	200	5F	7
D1	B	328	200	6D	7
D2	B	263	223	3F	7
D2	B	263	223	7A	7
D3	B	276	277	6A	28
D3	B	276	277	6A	28
D3	B	276	277	6A	28
D3	B	276	277	6A	28
D3	B	276	277	1F	7
D3	B	276	277	2A	7
D3	B	276	277	3D	7
D4	B	266	248	1F	28
D4	B	266	248	4A	28
D5	B	345	223	2B	28
D5	B	345	223	4F	28
D6	B	326	248	1D	11
D6	B	326	248	2A	11
D7	B	314	232	2F	7
D7	B	314	232	4A	7
D8	B	345	202	1F	7
D8	B	345	202	3B	7
D9	B	206	273	4F	28
D9	B	206	273	6B	28
D10	B	180	218	1F	8
D10	B	180	218	2C	8
D11	B	179	200	2A	8
D11	B	179	200	2B	8
D11	B	179	200	2F	8
D12	B	198	200	3A	8
D12	B	198	200	3B	8
D12	B	198	200	3F	8
D13	B	214	200	4F	8
D13	B	214	200	5A	8
D13	B	214	200	5B	8
D13	B	214	200	5B	8
D13	B	214	200	5C	8
D14	B	207	178	4F	8
D14	B	207	178	6C	8
D14	B	207	178	6E	8
D15	B	169	269	3F	28
D15	B	169	269	7C	28
D15	B	169	269	7C	28
D15	B	169	269	7C	28
D15	B	169	269	7D	28
D16	B	135	227	3F	22
D16	B	135	227	4A	22
D16	B	135	227	4B	22
D17	B	201	223	2C	10
D17	B	201	223	2C	10
D17	B	201	223	2D	10
D17	B	201	223	2D	10
D17	B	201	223	3F	10
D18	B	151	265	2D	18
D18	B	151	265	2D	18
D18	B	151	265	2D	18
D18	B	151	265	2D	18
D18	B	151	265	2E	18
D18	B	151	265	3E	18
D18	B	151	265	3F	18
D19	B	151	252	2C	18
D19	B	151	252	2C	18
D19	B	151	252	2C	18
D19	B	151	252	2C	18
D19	B	151	252	2D	18
D19	B	151	252	2D	18
D19	B	151	252	3F	18

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
D20	B	233	218	1F	9
D20	B	233	218	2C	9
D21	B	232	200	2A	9
D21	B	232	200	2B	9
D21	B	232	200	2F	9
D22	B	251	200	3A	9
D22	B	251	200	3B	9
D22	B	251	200	3F	9
D23	B	268	200	3F	9
D23	B	268	200	5A	9
D23	B	268	200	5B	9
D23	B	268	200	5B	9
D23	B	268	200	5C	9
D24	B	260	178	4F	9
D24	B	260	178	6C	9
D24	B	260	178	6E	9
D25	B	183	269	3F	28
D25	B	183	269	7D	28
D25	B	183	269	7D	28
D25	B	183	269	7E	28
D25	B	183	269	7E	28
D26	B	231	179	4F	9
D26	B	231	179	7C	9
D27	B	222	164	4F	18
D27	B	222	164	5C	18
D27	B	222	164	5C	18
D27	B	222	164	5C	18
D27	B	222	164	5C	18
D27	B	222	164	5D	18
D27	B	222	164	5D	18
D28	B	213	164	4F	18
D28	B	213	164	5D	18
D28	B	213	164	5D	18
D28	B	213	164	5D	18
D28	B	213	164	5D	18
D28	B	213	164	5E	18
D28	B	213	164	5E	18
D29	B	215	101	1D	27
D29	B	215	101	1E	27
D29	B	215	101	1E	27
D29	B	215	101	1E	27
D29	B	215	101	1F	27
D29	B	215	101	2F	27
D29	B	215	101	3A	27
D30	B	165	125	1F	15
D30	B	165	125	2A	15
D31	B	165	142	1E	15
D31	B	165	142	2C	15
D32	B	231	148	1F	12
D32	B	231	148	2A	12
D33	B	231	131	1E	12
D33	B	231	131	2C	12
D34	B	202	17	4E	14
D34	B	202	17	4E	14
D34	B	202	17	4F	14
D34	B	202	17	4F	14
D34	B	202	17	7D	14
D35	B	27	227	2A	19
D35	B	27	227	2B	19
D35	B	27	227	3F	19
D36	B	36	252	3F	19
D36	B	36	252	7B	19
D36	B	36	252	7C	19
D37	B	43	190	2A	20
D37	B	43	190	2B	20
D37	B	43	190	4F	20
D38	B	121	204	2A	21
D38	B	121	204	2B	21
D38	B	121	204	3F	21
D39	B	103	220	4A	21
D39	B	103	220	4F	21
D40	B	69	224	2E	19
D40	B	69	224	4B	19
D41	B	217	254	2A	10

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
D41	B	217	254	3B	10
D41	B	217	254	3C	10
D41	B	217	254	3F	10
D41	B	217	254	7A	10
D42	B	12	234	3D	19
D42	B	12	234	4F	19
D43	B	103	236	5C	21
D43	B	103	236	5F	21
D44	B	180	55	2D	23
D44	B	180	55	3F	23
D45	B	194	55	2D	24
D45	B	194	55	3F	24
D46	B	228	101	2C	27
D46	B	228	101	2F	27
D47	B	135	216	4A	22
D47	B	135	216	4F	22
D47	B	135	216	8D	22
D48	B	239	101	2B	27
D48	B	239	101	3F	27
D49	B	202	101	2A	27
D49	B	202	101	3F	27
D50	B	260	140	3C	12
D50	B	260	140	3F	12
D51	B	137	146	3C	15
D51	B	137	146	3F	15
D52	B	260	162	2F	12
D52	B	260	162	3B	12
D53	B	137	124	2F	15
D53	B	137	124	3B	15
D54	B	206	83	5F	18
D54	B	206	83	8D	18
D55	B	27	252	3F	19
D55	B	27	252	7B	19
D55	B	27	252	7B	19
D55	B	27	252	7C	19
D55	B	27	252	7C	19
D56	B	291	53	2C	14
D56	B	291	53	2E	14
D57	B	102	49	2C	17
D57	B	102	49	2E	17
D58	B	172	98	4A	27
D58	B	172	98	4E	27
D59	B	59	264	4B	18
D59	B	59	264	5A	18
D59	B	59	264	5B	18
D59	B	59	264	5B	18
D59	B	59	264	6B	18
D60	B	144	197	4F	20
D60	B	144	197	7C	20
D60	B	144	197	8C	20
D60	B	144	197	8D	20
D60	B	144	197	8D	20
D61	B	84	271	6B	22
D61	B	84	271	6B	22
D61	B	84	271	6C	22
D61	B	84	271	6C	22
D61	B	84	271	8E	22
D62	B	107	205	3A	21
D62	B	107	205	3B	21
D62	B	107	205	3B	21
D62	B	107	205	3B	21
D62	B	107	205	4F	21
D63	B	103	271	1F	22
D64	B	235	57	2D	23
D64	B	235	57	2F	23
D64	B	235	57	7C	23
D64	B	235	57	4C	24
D64	B	235	57	6C	24
D65	B	161	38	2B	23
D65	B	161	38	7B	23
D65	B	161	38	4B	24
D65	B	161	38	4F	24
D65	B	161	38	6B	24
D66	B	165	65	2E	25

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ROHDE & SCHWARZ	Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT IQ ANALOG/DIGITAL UNIT	Sprache: *Lang.:* de	Blatt: *Sh.:* 4 +	Aen: *C.I.:* 05.06
Typ: *Type:* AMIQ	Datum: *Date:* 98–10–16	Abteilung: *Dpt:* 1GPK	Name: *Name:* SR	Sachnr.: *Part No.:* **1110.2532.01 XY**

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
D66	B	165	65	4D	25
D66	B	165	65	4D	25
D66	B	165	65	5D	25
D66	B	165	65	5E	25
D67	B	231	71	2E	25
D67	B	231	71	4A	25
D67	B	231	71	4B	25
D67	B	231	71	5B	25
D67	B	231	71	5B	25
D68	B	27	241	2F	19
D68	B	27	241	7D	19
D69	B	113	222	2C	21
D69	B	113	222	4F	21
D70	B	53	244	2D	19
D70	B	53	244	4F	19
D70	B	53	244	6A	19
D70	B	53	244	6B	19
D70	B	53	244	6B	19
D70	B	53	244	6B	19
D70	B	53	244	6C	19
D71	B	235	46	2C	23
D71	B	235	46	3F	23
D71	B	235	46	5C	24
D72	B	161	49	2B	23
D72	B	161	49	4F	24
D72	B	161	49	5B	24
D73	B	82	209	5A	21
D73	B	82	209	6E	21
D74	B	50	205	2C	19
D74	B	50	205	5F	19
D75	B	108	64	4E	26
D75	B	108	64	5D	26
D76	B	108	77	4E	26
D76	B	108	77	5C	26
D77	B	108	90	4E	26
D77	B	108	90	5B	26
D78	B	108	102	3E	26
D78	B	108	102	5A	26
D79	B	288	87	2C	26
D79	B	288	87	3E	26
D80	B	288	74	2D	26
D80	B	288	74	3E	26
D81	B	288	99	2B	26
D81	B	288	99	2E	26
D82	B	288	112	2A	26
D82	B	288	112	2E	26
D83	B	234	88	4D	12
D84	B	168	184	2F	10
D85	B	301	274	4F	28
D85	B	301	274	7B	28
D85	B	301	274	7B	28
D85	B	301	274	7B	28
D85	B	301	274	7B	28
D86	B	189	35	3F	24
D86	B	189	35	5C	24
D86	B	189	35	5D	24
D86	B	189	35	5D	24
D86	B	189	35	5D	24
D87	B	101	253	2E	22
D87	B	101	253	4F	22
D88	B	129	253	2C	22
D88	B	129	253	5F	22
D89	B	115	253	2D	22
D89	B	115	253	5E	22
D90	B	151	212	5A	22
D90	B	151	212	5A	22
D90	B	151	212	5A	22
D90	B	151	212	5B	22
D90	B	151	212	7E	22
D91	B	151	225	5B	22
D91	B	151	225	5B	22
D91	B	151	225	5C	22
D91	B	151	225	6C	22
D91	B	151	225	7E	22

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
D92	B	123	237	2A	22
D92	B	123	237	6C	22
D92	B	123	237	6D	22
D92	B	123	237	6D	22
D92	B	123	237	8E	22
D93	B	113	236	2B	22
D93	B	113	236	3F	22
D94	B	48	265	4A	18
D94	B	48	265	4A	18
D94	B	48	265	5B	18
D94	B	48	265	6B	18
D94	B	48	265	7B	18
D94	B	48	265	7B	18
D94	B	48	265	8B	18
D95	B	123	216	6C	21
D95	B	123	216	3A	22
D95	B	123	216	3A	22
D95	B	123	216	3B	22
D95	B	123	216	6E	22
D96	B	123	227	3B	22
D96	B	123	227	3D	22
D96	B	123	227	3E	22
D96	B	123	227	7D	22
D96	B	123	227	7E	22
D97	B	101	243	4E	22
D97	B	101	243	5E	22
D98	B	129	243	4B	22
D98	B	129	243	6E	22
D99	B	115	243	4D	22
D99	B	115	243	6E	22
D100	B	132	263	1F	21
D100	B	132	263	2D	21
D101	B	135	237	2A	22
D101	B	135	237	3F	22
D101	B	135	237	4C	22
D101	B	135	237	4D	22
D101	B	135	237	4E	22
D101	B	135	237	6D	22
D101	B	135	237	6D	22
D102	B	229	269	2B	10
D102	B	229	269	3B	10
D102	B	229	269	4F	10
D102	B	229	269	5E	10
D102	B	229	269	5E	10
G2	B	312	258	3C	7
G3	B	245	271	2C	28
G4	B	312	270	3C	11
G7	B	11	211	1C	19
G8	B	97	192	4C	20
H1	B	405	15	2E	29
H2	B	405	56	2E	29
H3	B	405	36	2D	29
K1	B	41	163	2B	16
K1	B	41	163	5C	25
K2	B	60	163	2B	16
K2	B	60	163	2A	23
K3	B	47	163	1C	16
K3	B	47	163	3A	23
K4	B	53	163	1E	16
K4	B	53	163	5A	23
K5	B	64	16	6A	16
K5	B	64	16	7C	25
K6	B	64	22	7B	16
K6	B	64	22	8C	25
K7	B	86	64	7B	16
K7	B	86	64	3A	23
K8	B	64	29	7C	16
K8	B	64	29	4A	23
K9	B	64	35	7D	16
K9	B	64	35	5A	23
K10	B	94	53	3B	17
K10	B	94	53	7A	23
K11	B	106	37	3B	17
K11	B	106	37	7A	23

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
K12	B	110	30	5B	17
K12	B	110	30	5A	24
K13	B	117	30	5B	17
K13	B	117	30	6A	24
K14	B	129	37	6B	17
K14	B	129	37	7A	24
K15	B	135	37	7B	17
K15	B	135	37	8A	24
K16	B	155	26	7A	17
K16	B	155	26	7E	24
K17	B	155	15	7B	17
K17	B	155	15	5E	24
K21	B	356	163	2B	13
K21	B	356	163	5A	25
K22	B	337	163	2B	13
K22	B	337	163	2C	23
K23	B	349	163	1C	13
K23	B	349	163	3C	23
K24	B	343	163	1E	13
K24	B	343	163	5C	23
K25	B	332	16	6A	13
K25	B	332	16	7A	25
K26	B	332	22	7B	13
K26	B	332	22	8A	25
K27	B	310	64	7B	13
K27	B	310	64	3C	23
K28	B	332	29	7C	13
K28	B	332	29	4C	23
K29	B	332	35	7D	13
K29	B	332	35	5C	23
K30	B	302	53	3B	14
K30	B	302	53	7C	23
K31	B	290	37	3B	14
K31	B	290	37	7C	23
K32	B	286	30	5B	14
K32	B	286	30	5B	24
K33	B	279	30	5B	14
K33	B	279	30	6B	24
K34	B	267	37	6B	14
K34	B	267	37	7B	24
K35	B	261	37	7B	14
K35	B	261	37	8B	24
K36	B	241	26	7A	14
K36	B	241	26	8E	24
K37	B	241	15	7B	14
K37	B	241	15	6E	24
L1	B	368	133	2C	13
L2	B	368	120	3C	13
L3	B	368	107	3C	13
L4	B	368	72	5C	13
L5	B	17	72	5C	16
L6	B	17	133	2C	16
L7	B	17	107	3C	16
L8	B	17	120	3C	16
L9	B	329	63	6E	13
L10	B	52	63	6E	16
L11	B	335	130	2E	13
L12	B	335	117	3E	13
L13	B	58	130	2E	16
L14	B	58	117	3E	16
L15	B	280	144	2E	12
L16	B	280	163	2E	12
L17	B	280	148	2E	12
L18	B	280	137	3E	12
L19	B	280	140	3E	12
L20	B	309	134	6D	12
L21	B	301	134	6E	12
L22	B	244	153	1E	12
L23	B	322	82	4E	13
L24	B	322	90	4F	13
L25	B	195	225	4E	10
L26	B	367	51	2F	13
L27	B	370	48	2E	13
L28	B	361	93	2F	13

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ROHDE & SCHWARZ	Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT IQ ANALOG/DIGITAL UNIT	Sprache: *Lang.:* de	Blatt: *Sh.:* 5 +	Aet: *C.I.:* 05.06
Typ: *Type:* AMIQ	Datum: *Date:* 98–10–16	Abteilung: *Dpt:* 1GPK	Name: *Name:* SR	Sachnr.: *Part No.:* 1110.2532.01 XY

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
L29	B	361	86	3E	13
L30	B	352	18	4F	13
L31	B	349	22	4E	13
L32	B	323	57	3F	13
L33	B	326	53	3E	13
L34	B	220	276	4E	10
L35	B	254	49	1E	14
L36	B	254	54	1F	14
L37	B	116	138	2E	15
L38	B	116	124	2E	15
L39	B	116	150	3E	15
L40	B	116	146	3E	15
L41	B	85	135	6D	15
L42	B	116	142	2E	15
L43	B	102	137	6E	15
L44	B	152	159	1E	15
L45	B	47	22	4E	16
L46	B	44	18	4F	16
L47	B	46	53	2E	16
L48	B	16	51	3F	16
L49	B	19	47	4E	16
L50	B	10	93	3F	16
L51	B	10	86	3E	16
L54	B	45	90	2F	16
L55	B	46	57	2F	16
L56	B	45	82	2E	16
L57	B	141	47	1E	17
L58	B	141	52	1F	17
L59	B	95	212	7E	21
L60	B	83	201	6E	21
L61	B	153	110	4E	27
L62	B	153	103	4F	27
L63	B	18	245	1F	18
L64	B	11	245	1E	18
L65	B	70	263	6A	18
L66	B	70	272	7A	18
L67	B	12	181	1D	20
L68	B	12	186	1D	20
L69	B	12	191	1C	20
L70	B	121	183	6C	20
L71	B	147	187	7C	20
L72	B	35	175	4E	20
L73	B	151	192	4E	20
L74	B	95	244	7A	21
L75	B	95	237	7A	21
L76	B	95	229	8A	21
L77	B	335	104	3E	13
L78	B	58	104	3E	16
L79	B	362	62	5C	13
L80	B	11	61	5C	16
L81	B	208	153	1E	6
L82	B	194	267	3E	28
L83	B	208	130	1D	6
L84	B	187	133	1D	6
L85	B	208	137	1E	6
L86	B	187	148	1E	6
L87	B	303	129	2E	12
L88	B	303	124	3E	12
L89	B	92	130	3E	15
L90	B	92	124	2E	15
L91	B	51	237	5A	19
L93	B	309	124	1F	13
L94	B	309	129	1E	13
L95	B	87	124	1F	16
L96	B	87	130	1E	16
N1	B	335	178	2E	6
N2	B	135	178	3F	20
N2	B	135	178	6D	20
N3	B	114	177	5C	20
N4	B	276	70	6E	26
N5	B	88	194	3A	20
N6	B	10	265	2E	18
N7	B	27	177	1F	20
N8	B	89	253	5E	21

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
N9	B	276	96	5E	26
N10	B	118	274	2F	22
N11	B	44	225	2E	19
N11	B	44	225	3A	19
N11	B	44	225	3B	19
N12	B	47	192	2B	20
N12	B	47	192	2F	20
N13	B	317	152	7C	12
N13	B	317	152	7D	12
N14	B	335	58	3E	13
N14	B	335	58	6D	13
N15	B	331	86	4D	13
N15	B	331	86	4E	13
N16	B	340	18	4E	13
N16	B	340	18	6A	13
N17	B	371	90	3E	13
N17	B	371	90	4C	13
N18	B	379	52	2E	13
N18	B	379	52	6C	13
N19	B	127	271	1E	21
N19	B	127	271	2D	21
N19	B	127	271	3D	21
N20	B	304	32	2E	14
N20	B	304	32	4B	14
N21	B	278	51	2E	14
N21	B	278	51	3D	14
N22	B	178	113	4C	27
N23	B	79	149	7C	15
N23	B	79	149	7D	15
N24	B	20	89	3E	16
N24	B	20	89	4C	16
N25	B	29	52	4E	16
N25	B	29	52	6C	16
N26	B	53	18	4E	16
N26	B	53	18	6A	16
N27	B	60	185	3C	20
N27	B	60	185	3E	20
N28	B	54	86	2E	16
N28	B	54	86	4D	16
N29	B	58	57	2E	16
N29	B	58	57	6D	16
N30	B	117	54	3D	17
N30	B	117	54	3E	17
N31	B	97	31	2E	17
N31	B	97	31	4B	17
N32	B	260	78	4F	12
N33	B	36	211	1E	19
N33	B	36	211	2C	19
N33	B	36	211	3C	19
N34	B	96	70	1F	26
N34	B	96	70	6D	26
N34	B	96	70	7D	26
N35	B	96	96	1F	26
N35	B	96	96	6B	26
N35	B	96	96	7B	26
N36	B	96	109	2F	26
N36	B	96	109	6A	26
N36	B	96	109	7A	26
N37	B	96	83	2F	26
N37	B	96	83	6C	26
N37	B	96	83	7C	26
N38	B	300	68	2D	26
N38	B	300	68	2F	26
N38	B	300	68	3D	26
N39	B	300	93	2B	26
N39	B	300	93	3B	26
N39	B	300	93	3F	26
N40	B	300	106	2A	26
N40	B	300	106	3A	26
N40	B	300	106	3F	26
N41	B	300	81	2C	26
N41	B	300	81	3C	26
N41	B	300	81	3F	26
N43	B	308	109	4A	26

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
N43	B	308	109	4F	26
N44	B	88	105	4F	26
N44	B	88	105	7A	26
N45	B	126	95	2D	26
N45	B	126	95	4F	26
N46	B	302	162	6A	12
N46	B	302	162	6D	12
N47	B	302	149	6C	12
N47	B	302	149	6D	12
N48	B	94	161	6A	15
N48	B	94	161	6D	15
N49	B	94	147	6C	15
N49	B	94	147	6D	15
N50	B	172	84	4E	12
N51	B	142	78	4F	15
N52	B	255	93	4E	12
N53	B	137	93	4E	15
N54	B	217	31	3E	14
N54	B	217	31	3F	14
N55	B	201	29	7C	14
N55	B	201	29	4E	17
N55	B	201	29	7D	17
P1	B	298	241	3C	7
P2	B	298	239	3C	7
P3	B	304	241	4D	7
P4	B	298	244	3C	7
P5	B	288	239	3C	28
P6	B	288	241	5C	28
P7	B	288	244	3C	28
P8	B	288	246	3C	28
P9	B	256	150	2B	12
P10	B	141	150	2B	15
P11	B	305	239	3D	7
P12	B	306	241	3D	7
P13	B	307	239	3D	7
P14	B	309	241	3D	7
P15	B	310	239	3D	7
P16	B	222	253	4B	10
P17	B	312	239	3D	7
P18	B	318	258	3C	11
P19	B	318	260	3C	11
P20	B	61	255	5B	19
P21	B	58	255	6B	19
P22	B	314	164	7A	12
P23	B	188	232	8C	7
P24	B	187	225	8A	7
P25	B	191	228	8A	7
P26	B	131	276	3D	21
P27	B	100	199	3B	21
P28	B	93	205	8B	21
P29	B	227	265	2B	10
P30	B	131	208	2A	22
P31	B	144	204	8C	20
P32	B	219	28	4C	27
P34	B	185	229	8A	7
P35	B	80	165	7A	15
P36	B	32	214	2C	19
P56	B	293	57	2D	14
P57	B	295	44	2D	14
P58	B	196	12	8D	14
P73	B	98	58	2D	17
P74	B	107	45	2D	17
P75	B	220	153	5D	18
P76	B	142	260	3D	18
P77	B	45	214	4C	19
P78	B	56	251	6A	19
P79	B	69	222	4B	19
P80	B	44	228	3A	19
P81	B	69	182	3B	20
P82	B	53	184	3A	20
P83	B	93	84	7B	26
P84	B	93	71	7C	26
P85	B	93	97	7B	26
P86	B	93	109	7A	26

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ROHDE & SCHWARZ	Benennung: *Designation:* ED IQ ANALOG/DIGITAL UNIT IQ ANALOG/DIGITAL UNIT	Sprache: *Lang.:* de	Blatt: *Sh.:* 6 +	Aei: *C.I.:* 05.06
Typ: *Type:* AMIQ	Datum: *Date:* 98–10–16	Abteilung: *Dpt:* 1GPK	Name: *Name:* SR	Sachnr.: *Part No.:* **1110.2532.01 XY**

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
P87	B	304	80	3B	26
P88	B	304	67	3C	26
P89	B	304	93	3B	26
P90	B	304	105	3A	26
P92	B	185	118	3C	27
P93	B	180	108	4B	27
R1	B	333	201	6D	7
R2	B	247	219	6C	7
R3	B	346	197	2B	7
R4	B	349	197	2B	7
R5	B	351	197	2B	7
R6	B	354	197	2B	7
R7	B	357	216	2B	7
R8	B	354	217	2B	7
R9	B	351	217	2B	7
R10	B	348	217	2B	7
R11	B	321	230	3B	7
R12	B	313	207	4C	7
R13	B	298	206	3D	7
R14	B	297	206	3D	7
R15	B	246	249	7C	7
R16	B	333	203	6E	7
R17	B	331	199	6E	7
R18	B	202	214	3A	8
R19	B	244	249	6C	7
R20	B	171	243	1D	8
R21	B	175	243	1D	8
R22	B	173	243	1D	8
R23	B	204	197	6A	8
R24	B	257	197	6A	9
R25	B	255	214	3A	9
R26	B	226	243	1D	9
R27	B	231	243	1D	9
R28	B	224	243	1D	9
R29	B	242	221	8D	7
R30	B	339	245	3D	11
R31	B	342	270	3D	11
R32	B	338	270	2D	11
R33	B	341	245	3D	11
R34	B	346	270	3C	11
R35	B	344	270	3C	11
R36	B	356	238	1B	28
R37	B	354	218	2B	28
R38	B	351	218	1B	28
R39	B	348	218	2B	28
R40	B	346	218	1B	28
R41	B	304	244	8B	7
R42	B	354	238	2B	28
R43	B	349	238	2B	28
R44	B	351	238	1B	28
R45	B	267	272	3C	28
R46	B	260	250	3B	28
R47	B	289	274	3D	28
R48	B	287	274	3D	28
R49	B	342	180	3E	6
R50	B	377	15	5E	7
R51	B	379	15	5E	7
R52	B	382	15	5E	7
R53	B	257	294	2D	7
R54	B	303	207	5D	7
R55	B	305	207	5E	7
R56	B	315	206	4D	7
R57	B	169	264	6C	28
R58	B	135	291	7C	28
R59	B	155	291	7D	28
R60	B	190	294	7E	28
R61	B	181	294	7D	28
R62	B	342	177	3F	6
R63	B	171	264	6D	28
R64	B	187	264	6E	28
R65	B	183	264	6D	28
R66	B	359	247	2C	7
R67	B	359	252	2C	7
R68	B	277	291	8A	28
R69	B	282	291	8A	28
R70	B	287	291	8A	28
R71	B	292	291	8A	28
R72	B	229	177	7C	9
R73	B	164	123	2A	15
R74	B	231	150	2A	12
R75	B	124	175	6C	20
R76	B	305	244	8C	7
R77	B	131	175	6C	20
R78	B	164	139	2C	15
R79	B	230	134	2C	12
R80	B	215	236	2E	10
R81	B	53	275	6B	18
R82	B	380	55	5C	13
R83	B	252	217	8D	7
R84	B	304	247	3D	7
R85	B	211	220	2D	10
R86	B	201	219	3C	10
R87	B	203	220	2C	10
R88	B	205	220	2C	10
R89	B	215	220	2E	10
R90	B	209	220	2D	10
R91	B	207	220	2D	10
R92	B	198	222	2E	10
R93	B	217	220	3E	10
R94	B	292	241	3B	7
R95	B	292	239	3B	7
R96	B	307	245	3E	7
R97	B	293	244	3B	28
R98	B	285	245	3B	28
R99	B	285	243	5C	28
R100	B	30	55	5C	16
R101	B	123	189	6B	20
R102	B	338	92	4D	13
R103	B	381	94	4B	13
R104	B	338	83	4D	13
R105	B	30	94	4B	16
R106	B	344	64	5D	13
R107	B	61	92	4D	16
R108	B	326	94	4E	13
R109	B	334	136	2E	13
R110	B	49	93	4E	16
R111	B	57	136	2E	16
R112	B	269	15	6C	14
R113	B	125	17	6C	17
R114	B	114	188	5C	20
R115	B	75	286	7B	22
R116	B	72	286	7B	22
R117	B	283	189	4D	18
R118	B	285	189	4D	18
R119	B	288	189	4D	18
R120	B	290	189	4C	18
R121	B	179	255	1D	18
R122	B	179	253	1D	18
R123	B	179	250	1D	18
R124	B	179	248	1C	18
R125	B	39	278	3A	18
R126	B	179	245	1C	18
R127	B	60	222	3B	19
R128	B	114	190	5C	20
R129	B	150	188	7B	20
R130	B	114	185	5C	20
R131	B	52	175	3F	20
R132	B	83	243	7A	21
R133	B	316	155	7B	12
R134	B	343	67	5D	13
R135	B	80	145	7B	15
R136	B	66	67	5D	16
R137	B	225	50	4C	24
R138	B	171	42	4B	24
R139	B	168	67	4D	25
R140	B	168	69	4C	25
R141	B	228	67	4A	25
R142	B	228	69	4B	25
R143	B	223	57	3C	24
R144	B	179	43	3B	24
R145	B	179	65	3D	25
R146	B	179	70	3D	25
R147	B	218	70	3A	25
R148	B	218	65	3B	25
R149	B	296	159	6B	12
R150	B	289	159	5B	12
R151	B	296	162	6A	12
R152	B	289	162	5A	12
R153	B	289	145	5C	12
R154	B	296	145	6C	12
R155	B	296	149	6C	12
R156	B	289	149	5C	12
R157	B	108	160	5A	15
R158	B	108	163	5B	15
R159	B	100	160	6A	15
R160	B	100	163	6B	15
R161	B	100	150	6C	15
R162	B	100	147	6C	15
R163	B	108	150	5C	15
R164	B	108	147	5C	15
R165	B	31	264	2B	18
R166	B	93	103	7A	26
R167	B	304	112	3A	26
R168	B	200	15	7D	14
R169	B	192	20	4F	14
R170	B	206	20	4E	14
R171	B	180	40	5E	24
R172	B	198	92	7E	18
R173	B	198	83	8E	18
R174	B	196	94	7C	18
R175	B	211	91	8C	18
R176	B	209	89	8E	18
R177	B	198	88	7E	18
R178	B	198	86	7E	18
R179	B	196	84	7C	18
R180	B	196	90	7C	18
R181	B	223	166	4C	18
R182	B	283	181	4E	18
R183	B	285	181	4D	18
R184	B	290	181	4C	18
R185	B	171	258	2E	18
R186	B	171	255	2D	18
R187	B	171	253	2D	18
R188	B	171	250	2C	18
R189	B	57	276	3B	18
R190	B	55	275	6B	18
R191	B	59	275	5B	18
R192	B	36	268	3A	18
R193	B	169	248	2C	18
R194	B	288	181	4D	18
R195	B	42	222	2B	19
R196	B	42	225	3A	19
R197	B	14	238	3D	19
R198	B	21	234	6D	19
R199	B	23	237	6E	19
R200	B	26	255	7D	19
R201	B	36	255	6C	19
R202	B	44	253	6B	19
R203	B	56	247	6C	19
R204	B	64	215	4B	19
R205	B	64	222	4B	19
R206	B	39	222	2B	19
R207	B	35	222	2B	19
R208	B	39	225	2A	19
R209	B	35	225	2A	19
R210	B	22	223	1A	19
R211	B	22	225	1A	19
R212	B	124	185	5E	20
R213	B	126	184	6E	20
R214	B	51	275	6B	18
R215	B	143	188	7C	20
R216	B	49	185	2A	20

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Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
R217	B	36	178	1A	20
R218	B	39	197	1A	20
R219	B	48	182	2B	20
R220	B	137	188	6D	20
R221	B	139	188	7E	20
R222	B	147	178	7C	20
R223	B	126	179	5D	20
R224	B	124	180	5D	20
R225	B	171	180	2F	10
R226	B	220	253	3A	10
R227	B	117	203	3C	21
R228	B	115	201	1B	21
R229	B	105	223	4A	21
R230	B	112	210	2C	21
R231	B	105	238	4B	21
R232	B	96	205	5B	21
R233	B	96	202	5B	21
R234	B	93	219	6B	21
R235	B	118	210	2C	21
R236	B	130	199	1A	21
R237	B	215	240	2A	10
R238	B	190	53	2D	23
R239	B	212	25	6C	14
R240	B	204	53	2D	24
R241	B	219	49	2C	24
R242	B	208	47	2B	24
R243	B	208	51	2B	24
R244	B	220	47	2C	24
R245	B	185	62	2D	25
R246	B	187	74	2D	25
R247	B	190	74	2D	25
R248	B	189	62	2D	25
R249	B	208	74	2B	25
R250	B	206	62	2B	25
R251	B	209	62	2B	25
R252	B	211	74	2A	25
R253	B	120	101	2D	26
R254	B	205	105	2B	27
R255	B	176	106	5B	27
R256	B	177	108	4A	27
R257	B	171	95	5B	27
R258	B	218	102	2C	27
R259	B	372	97	4C	13
R260	B	22	97	4C	16
R261	B	70	196	3D	20
R262	B	94	222	8A	21
R263	B	39	272	3A	18
R264	B	143	175	6D	20
R265	B	86	184	3C	20
R266	B	295	13	4B	14
R267	B	295	16	4B	14
R268	B	295	18	4B	14
R269	B	295	21	4B	14
R270	B	101	21	4B	17
R271	B	101	13	4B	17
R272	B	101	16	4B	17
R273	B	101	18	4B	17
R274	B	222	20	8C	14
R275	B	218	20	8B	14
R276	B	179	20	8B	17
R277	B	175	20	8C	17
R278	B	14	255	2E	18
R279	B	199	258	7A	10
R280	B	29	191	1E	20
R281	B	25	188	1E	20
R282	B	95	265	1E	22
R283	B	230	265	2B	10
R284	B	80	251	5E	21
R285	B	80	257	5D	21
R286	B	204	30	7C	14
R287	B	230	277	3B	10
R288	B	270	86	6D	26
R289	B	270	80	6E	26
R290	B	271	106	5E	26

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
R291	B	271	111	5D	26
R292	B	111	264	2E	22
R293	B	111	268	2E	22
R294	B	311	159	6A	12
R295	B	328	155	7C	12
R296	B	330	155	7C	12
R297	B	348	51	7D	13
R298	B	348	48	6D	13
R299	B	373	32	7B	13
R300	B	373	36	7C	13
R301	B	335	50	7D	13
R302	B	332	50	7D	13
R303	B	340	28	8A	13
R304	B	340	30	7A	13
R305	B	335	11	6A	13
R306	B	337	11	6A	13
R307	B	367	97	4C	13
R308	B	364	97	4C	13
R309	B	370	39	7B	13
R310	B	370	42	7B	13
R311	B	272	42	3C	14
R312	B	275	42	3C	14
R313	B	69	155	7C	15
R314	B	67	155	7C	15
R315	B	86	163	6A	15
R316	B	19	38	7B	16
R317	B	19	42	7B	16
R318	B	17	97	4C	16
R319	B	61	11	6A	16
R320	B	59	11	6A	16
R321	B	56	28	8A	16
R322	B	56	30	7A	16
R323	B	14	97	4C	16
R324	B	58	49	7D	16
R325	B	23	32	7C	16
R326	B	23	35	7B	16
R327	B	55	49	7D	16
R328	B	71	50	7C	16
R329	B	71	48	7C	16
R330	B	123	41	3C	17
R331	B	120	41	3C	17
R332	B	269	166	4B	12
R333	B	127	121	4B	15
R334	B	297	54	1C	14
R335	B	99	54	1C	17
R336	B	271	12	6C	14
R337	B	271	15	6C	14
R338	B	271	17	5C	14
R339	B	127	15	5C	17
R340	B	127	12	6C	17
R341	B	125	12	6C	17
R342	B	121	72	1D	26
R343	B	232	22	6D	24
R344	B	298	36	3C	14
R345	B	165	22	5D	24
R346	B	98	37	3C	17
R347	B	37	181	2B	20
R348	B	38	194	2A	20
R349	B	72	179	3B	20
R350	B	383	58	5C	13
R351	B	269	17	6B	14
R352	B	257	20	7C	14
R353	B	257	22	7C	14
R354	B	257	17	7C	14
R355	B	257	25	7C	14
R356	B	33	58	5C	16
R357	B	127	17	6B	17
R358	B	139	17	7C	17
R359	B	139	20	7C	17
R360	B	139	22	7C	17
R361	B	139	25	7C	17
R362	B	47	229	3A	19
R363	B	50	229	3B	19
R364	B	11	222	1B	19

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
R365	B	39	205	1F	19
R366	B	46	219	2F	19
R367	B	50	218	2E	19
R368	B	41	214	1E	19
R369	B	239	48	3C	23
R370	B	239	46	4C	23
R371	B	239	44	5C	23
R372	B	157	51	5B	23
R373	B	157	49	4B	23
R374	B	157	39	7B	23
R375	B	157	37	7B	23
R376	B	239	56	7C	23
R377	B	239	58	7C	23
R378	B	157	47	3B	23
R379	B	239	54	5C	24
R380	B	239	52	6C	24
R381	B	239	38	8C	24
R382	B	239	40	7C	24
R383	B	157	55	7A	24
R384	B	157	57	8A	24
R385	B	157	43	6A	24
R386	B	157	41	5A	24
R387	B	239	67	5A	25
R388	B	239	70	6A	25
R389	B	239	65	7A	25
R390	B	157	65	7D	25
R391	B	157	68	6D	25
R392	B	157	70	5D	25
R393	B	168	95	5E	27
R394	B	274	166	4B	12
R395	B	262	121	4C	12
R396	B	269	121	4C	12
R397	B	122	121	4B	15
R398	B	134	166	4C	15
R399	B	127	166	4C	15
R400	B	337	136	2D	13
R401	B	60	136	2D	16
R402	B	279	159	4B	12
R403	B	279	151	4B	12
R404	B	278	128	4C	12
R405	B	278	130	4C	12
R406	B	340	64	5D	13
R407	B	342	52	6D	13
R408	B	378	79	5B	13
R409	B	344	86	4D	13
R410	B	383	55	6B	13
R411	B	383	49	6B	13
R412	B	117	127	4B	15
R413	B	117	136	4B	15
R414	B	118	157	4C	15
R415	B	118	158	4C	15
R416	B	67	85	4C	16
R417	B	32	49	6B	16
R418	B	32	55	6B	16
R419	B	28	78	5B	16
R420	B	65	51	6D	16
R421	B	63	63	5D	16
R422	B	299	156	6B	12
R423	B	303	166	6A	12
R424	B	303	153	6C	12
R425	B	299	143	6C	12
R426	B	256	155	2B	12
R427	B	318	155	7C	12
R428	B	337	18	6A	13
R429	B	61	83	4D	16
R430	B	337	20	7A	13
R431	B	286	44	2D	14
R432	B	278	47	3D	14
R433	B	275	48	3C	14
R434	B	307	31	4B	14
R435	B	272	31	5B	14
R436	B	93	156	6A	15
R437	B	141	155	2B	15
R438	B	78	145	7C	15

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el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
R439	B	97	166	6B	15
R440	B	93	143	6C	15
R441	B	97	153	6C	15
R442	B	67	64	5D	16
R443	B	59	18	6A	16
R444	B	59	20	7A	16
R445	B	107	57	2D	17
R446	B	123	52	3D	17
R447	B	123	50	3C	17
R448	B	100	31	4B	17
R449	B	124	31	5B	17
R450	B	151	183	7C	20
R451	B	72	224	4B	19
R452	B	257	27	7C	14
R453	B	139	27	7C	17
R454	B	56	184	3B	20
R455	B	335	83	4D	13
R456	B	335	89	4D	13
R457	B	374	85	4B	13
R458	B	374	91	4B	13
R459	B	219	244	3B	10
R460	B	211	240	3B	10
R461	B	272	26	6B	14
R462	B	234	265	5E	10
R463	B	201	240	3B	10
R464	B	23	85	4B	16
R465	B	23	91	4B	16
R466	B	58	83	4D	16
R467	B	58	89	4D	16
R468	B	124	26	6B	17
R469	B	287	57	1D	14
R470	B	297	48	1D	14
R471	B	105	44	1D	17
R472	B	100	59	1D	17
R473	B	29	206	2C	19
R474	B	72	175	4B	20
R475	B	46	195	2A	20
R476	B	46	181	2B	20
R477	B	100	270	1F	22
R478	B	188	114	3B	27
R479	B	188	106	3A	27
R480	B	193	110	3B	27
R481	B	182	118	3C	27
R482	B	267	121	4C	12
R483	B	129	166	4C	15
R484	B	174	42	3B	24
R485	B	224	52	3C	24
R486	B	173	67	4D	25
R487	B	173	69	4C	25
R488	B	223	69	4A	25
R489	B	223	67	4B	25
R490	B	314	146	6C	12
R491	B	85	150	6C	15
R492	B	75	291	8B	22
R493	B	72	291	8B	22
R494	B	84	221	6A	21
R495	B	244	147	2A	12
R496	B	244	145	2A	12
R497	B	244	144	2A	12
R498	B	244	142	2B	12
R499	B	244	140	2B	12
R500	B	244	138	2B	12
R501	B	244	124	2D	12
R502	B	244	128	2C	12
R503	B	244	130	2C	12
R504	B	244	132	2C	12
R505	B	244	134	2B	12
R506	B	244	136	2B	12
R507	B	244	126	2D	12
R508	B	244	123	2D	12
R509	B	152	147	2D	15
R510	B	152	143	2C	15
R511	B	152	141	2C	15
R512	B	152	137	2B	15
R513	B	152	135	2B	15
R514	B	152	145	2D	15
R515	B	152	149	2D	15
R516	B	152	133	2B	15
R517	B	152	130	2B	15
R518	B	152	124	2A	15
R519	B	152	126	2A	15
R520	B	152	128	2A	15
R521	B	152	131	2B	15
R522	B	152	139	2C	15
R523	B	51	265	5A	18
R524	B	44	250	6B	19
R525	B	56	245	6B	19
R526	B	50	255	6A	19
R527	B	143	181	7C	20
R528	B	144	201	8C	20
R529	B	141	201	8C	20
R530	B	117	199	2B	21
R531	B	117	204	2B	21
R532	B	100	203	5B	21
R533	B	117	197	2A	21
R534	B	90	205	8B	21
R535	B	104	199	3B	21
R536	B	138	201	7D	20
R537	B	207	240	3B	10
R538	B	183	255	5B	10
R539	B	183	244	5B	10
R540	B	145	236	6C	22
R541	B	203	240	7A	10
R542	B	166	180	2F	10
R543	B	62	189	3C	20
R544	B	302	164	6A	12
R545	B	302	151	6B	12
R546	B	291	56	2D	14
R547	B	293	45	2D	14
R548	B	94	159	6A	15
R549	B	94	145	6B	15
R550	B	103	46	2D	17
R551	B	104	58	2D	17
R552	B	93	64	7C	26
R553	B	93	77	7C	26
R554	B	93	90	7B	26
R555	B	304	74	3C	26
R556	B	304	87	3C	26
R557	B	304	99	3B	26
R558	B	341	55	6D	13
R559	B	64	54	6D	16
R560	B	264	17	7B	14
R561	B	269	12	6C	14
R562	B	125	15	6C	17
R563	B	132	17	7B	17
R564	B	147	175	7D	20
R565	B	232	32	8D	24
R566	B	23	228	2B	19
R567	B	30	196	2B	20
R568	B	88	205	6A	21
R569	B	165	32	7D	24
R570	B	328	151	7C	12
R571	B	330	148	7D	12
R572	B	342	28	8A	13
R573	B	349	27	8A	13
R574	B	361	17	5A	13
R575	B	363	19	5A	13
R576	B	371	150	2A	13
R577	B	371	155	2A	13
R578	B	260	44	3D	14
R579	B	268	44	3D	14
R580	B	222	34	7D	14
R581	B	227	31	7D	14
R582	B	179	258	2E	18
R583	B	280	189	4E	18
R584	B	217	37	3E	14
R585	B	212	37	3E	14
R586	B	293	181	4C	18
R587	B	66	210	4B	19
R588	B	205	17	7E	14
R589	B	188	14	7D	14
R590	B	191	14	7D	14
R591	B	208	17	7E	14
R592	B	69	151	7C	15
R593	B	67	148	7D	15
R594	B	37	239	8B	19
R595	B	25	151	2A	16
R596	B	25	147	2A	16
R597	B	34	17	5A	16
R598	B	30	17	5A	16
R599	B	54	28	8A	16
R600	B	47	27	8A	16
R601	B	118	44	3D	17
R602	B	113	44	3D	17
R603	B	174	34	7D	17
R604	B	169	31	7D	17
R605	B	87	102	8A	26
R606	B	104	74	7D	26
R607	B	104	86	7C	26
R608	B	104	99	7B	26
R609	B	99	74	7C	26
R610	B	99	86	7C	26
R611	B	99	99	7B	26
R612	B	93	112	7A	26
R613	B	309	112	4A	26
R614	B	292	65	3D	26
R615	B	292	77	3C	26
R616	B	292	90	3B	26
R617	B	298	65	3C	26
R618	B	298	77	3C	26
R619	B	298	90	3B	26
R620	B	303	103	3A	26
R621	B	156	119	5C	27
R622	B	159	116	5C	27
R623	B	342	70	5E	13
R624	B	65	69	5D	16
R625	B	99	112	7A	26
R626	B	298	103	3A	26
R627	B	104	112	7A	26
R628	B	292	103	3A	26
R629	B	19	209	1C	19
R630	B	32	208	2C	19
R631	B	126	92	1E	26
R632	B	331	94	4E	13
R633	B	281	51	3D	14
R634	B	114	57	3D	17
R635	B	54	93	4E	16
R636	B	63	269	5A	18
R637	B	275	30	5B	14
R638	B	121	30	5B	17
R639	B	36	264	3B	18
R640	B	199	248	6B	10
R641	B	190	241	6B	10
R642	B	294	51	1C	14
R643	B	311	31	4C	14
R644	B	295	36	3C	14
R645	B	211	23	6D	14
R646	B	192	248	6B	10
R647	B	199	252	6A	10
R648	B	104	31	4C	17
R649	B	99	49	1C	17
R650	B	185	23	6D	14
R651	B	101	37	3C	17
R652	B	66	264	6B	18
R653	B	100	276	1F	22
R654	B	220	83	4D	12
R655	B	136	202	7D	20
R656	B	135	187	7D	20
R657	B	146	200	7D	20
R658	B	132	225	7D	22
R659	B	266	69	4F	12
R660	B	266	63	4F	12

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el. Kennz. / Part	Seite / Side	X	Y	Planq. / Sqr	Bl. / Pg
R661	B	144	232	6C	22
R662	B	114	224	2A	22
R663	B	114	238	1B	22
R664				6E	7
R665	B	266	103	4E	12
R666	B	266	109	4E	12
R667	B	132	224	7D	22
R668	B	132	231	6D	22
R669	B	132	211	8D	22
R670	B	131	217	8D	22
R671	B	130	106	4E	15
R672	B	130	112	4E	15
R673	B	140	206	3A	22
R674	B	143	219	3A	22
R675	B	115	261	2B	22
R676	B	112	242	3E	22
R677	B	51	180	3A	20
R678	B	83	173	4C	20
R679	B	129	263	1E	21
R680	B	140	276	1E	21
R681	B	130	62	4F	15
R682	B	130	68	4F	15
R683	B	238	91	5D	12
R684	B	233	91	4D	12
R685	B	184	84	4E	12
R686	B	191	84	4E	12
R687	B	126	175	6C	20
R688	B	125	274	3D	21
R689	B	185	25	6D	17
R690	B	202	25	6C	14
R691	B	194	25	6D	17
R692	B	275	25	6B	14
R693	B	121	25	6B	17
R694	B	206	27	7C	14
R695	B	190	29	7D	17
R696	B	200	36	7C	14
R697	B	196	36	6D	17
R698	B	377	158	2A	13
R699	B	369	19	5A	13
R700	B	24	17	5A	16
R701	B	10	151	2A	16
R702	B	215	98	1F	27
R703	B	12	261	2F	18
R704	B	9	259	2F	18
R705	B	30	273	2B	18
R706	B	234	277	5E	10
R707	B	192	33	7C	17
R708	B	129	277	3E	21
R709	B	33	287	2B	18
R710	B	209	30	7C	14
R711	B	39	287	2B	18
R712	B	243	248	6D	7
R713	B	248	248	6D	7
R714	B	250	248	6D	7
R715	B	302	245	8B	7
R716	B	298	236	5A	7
R717	B	296	236	5A	7
R718	B	290	237	5A	7
R719	B	283	238	6A	7
R720	B	237	234	1C	8
R721	B	300	196	5A	8
R722	B	300	198	5A	9
R723	B	321	210	5E	7
R724	B	192	252	6C	10
R725	B	220	250	4A	10
R726	B	220	248	4A	10
R727	B	212	258	4C	10
R728	B	210	258	4C	10
R729	B	204	258	8A	10
R730	B	202	258	8A	10
R731	B	176	174	1E	10
R732	B	170	174	1F	10
R733	B	216	238	1A	10
R734	B	206	275	6B	28
R735	B	218	218	3E	10
R736	B	198	219	3C	10
R737	B	301	278	6B	28
R738	B	297	278	6C	28
R739	B	303	290	7B	28
R740	B	298	290	7B	28
R741	B	149	238	7A	22
R742	B	186	32	6C	17
R743	B	363	268	1A	7
R744	B	149	236	7A	22
R745	B	131	235	6D	22
R746	B	217	259	3B	10
R747	B	246	216	2E	7
R748	B	258	217	3E	7
R749	B	123	273	1F	21
R750	B	240	248	6D	7
R751	B	319	201	6D	7
R752	B	217	224	2E	10
R753	B	302	258	3C	7
R754	B	215	23	5D	14
R755	B	183	23	5D	17
R756	B	197	252	6B	10
R757	B	209	86	7E	18
R758	B	209	84	7E	18
R759				2A	10
R760				6C	10
T1	B	88	225	6A	21
U1	B	211	54	3B	24
U1	B	211	54	3B	24
U1	B	211	54	3C	24
U1	B	211	54	3D	24
U1	B	211	54	4E	24
U2	B	182	65	3C	25
U2	B	182	65	3D	25
U2	B	182	65	3D	25
U2	B	182	65	3E	25
U2	B	182	65	3E	25
U3	B	214	71	3A	25
U3	B	214	71	3B	25
U3	B	214	71	3B	25
U3	B	214	71	3B	25
U3	B	214	71	3E	25
V1	B	257	286	2D	7
V2	B	136	286	7C	28
V3	B	156	286	7D	28
V4	B	191	285	7E	28
V5	B	179	285	7D	28
V6	B	293	286	7A	28
V7	B	288	286	7A	28
V8	B	64	219	4B	19
V10	B	40	266	3B	18
V11	B	93	181	4C	20
V12	B	126	80	1E	26
V13	B	32	268	2B	18
V14	B	82	276	7B	22
V15	B	212	41	2B	24
V16	B	216	41	2D	24
V17	B	196	67	2E	25
V18	B	196	71	2C	25
V19	B	201	69	2A	25
V20	B	201	65	2B	25
V21	B	185	109	3B	27
V22	B	54	173	3E	20
V23	B	304	20	4A	14
V24	B	297	23	4B	14
V25	B	94	22	4B	17
V26	B	97	22	4A	17
V27	B	244	48	3C	23
V28	B	244	46	4C	23
V29	B	244	43	5C	23
V30	B	152	49	4A	23
V31	B	152	46	3A	23
V32	B	152	51	5A	23
V33	B	221	48	3C	24
V34	B	174	45	3B	24
V35	B	245	67	5A	25
V36	B	172	70	4D	25
V37	B	172	65	4D	25
V38	B	245	70	6A	25
V39	B	245	65	8A	25
V40	B	152	65	8C	25
V41	B	152	68	6C	25
V42	B	225	70	4B	25
V43	B	225	65	4A	25
V44	B	152	70	5C	25
V45	B	64	192	3E	20
V46	B	293	31	4C	14
V47	B	304	17	4A	14
V48	B	86	27	4B	17
V49	B	86	23	4A	17
V50	B	85	277	7B	22
V51	B	71	231	5B	19
V52	B	187	104	3A	27
V53	B	187	117	3B	27
V54	B	151	178	7D	20
V55	B	129	182	6D	20
V56	B	129	177	5D	20
V57	B	233	20	6E	24
V58	B	23	220	2B	19
V59	B	35	194	2B	20
V60	B	154	38	7B	23
V61	B	242	56	7C	23
V62	B	242	52	6C	24
V63	B	242	38	8C	24
V64	B	154	56	8A	24
V65	B	154	43	6A	24
V66	B	199	27	6C	14
V66	B	199	27	6D	17
V67	B	163	20	5E	24
V68	B	35	277	3A	18
V69	B	93	177	4C	20
V70	B	59	192	2E	20
V71	B	188	255	5B	10
V72	B	197	243	6B	10
V73	B	194	245	6B	10
V74	B	199	243	7B	10
V75	B	192	245	7B	10
V76	B	188	244	5B	10
V77	B	304	285	7B	28
V78	B	299	285	7B	28
V79	B	233	30	8E	24
V80	B	163	30	7E	24
V81	B	55	179	3B	20
W30	B	413	42	1D	29
X1	B	147	244	8B	22
X2	B	198	153	1E	6
X3	B	295	184	4C	18
X4	B	174	245	1C	18
X5	B	322	163	8C	12
X6	B	349	56	7D	13
X7	B	297	260	2D	28
X8	B	347	132	2D	13
X9	B	310	41	8C	13
X10	B	368	267	1B	7
X11	B	363	11	5A	13
X12	B	377	150	1A	13
X13	B	377	132	2B	13
X14	B	330	161	8C	12
X15	B	364	41	7B	13
X16	B	74	163	8C	15
X17	B	26	132	2B	16
X18	B	19	151	1A	16
X19	B	30	10	5A	16
X20	B	368	211	1D	7
X21	B	86	41	8C	16
X22	B	67	161	8C	15
X23	B	13	40	7B	16
X24	B	72	55	7C	16

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Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
X25	B	231	116	8C	27
X26	B	48	133	2D	16
X27	B	43	238	8B	19
X28	B	90	184	4C	20
X29	B	326	241	4E	/
X30	B	383	10	5E	7
X31	B	240	255	7D	7
X32	B	257	255	3E	28
X50	B	285	149	5B	12
X51	B	111	154	5B	15
X52	B	285	157	5B	12
X53	B	111	145	5B	15

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
X60	B	415	130	1A	29
X61	B	413	145	1C	29
X63	B	402	128	2A	29
X100	B	135	297	8C	28
X101	B	155	297	8D	28
X102	B	175	297	8D	28
X103	B	196	297	8E	28
X104	B	257	297	1A	6
X105	B	318	282	4B	11
X106	B	290	298	8B	28
X107	B	33	297	6A	6
X108	B	53	297	7A	6

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
X109	B	74	297	7A	6
X111	B	218	15	8D	6
X112	B	178	15	8D	6
X115	B	94	297	7A	6
X116	B	114	297	8A	6
X117	B	216	297	8A	6
X118	B	236	297	8A	6
X123	B	178	291	7D	28
X124	B	189	291	7E	28
X133	B	171	291	8D	28
X134	B	199	291	8E	28

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ROHDE&SCHWARZ

Circuit Documents

for Module

Differential Outputs

1110.3700.02

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUEHRUNG MOD 02 = BASIC MODEL				
A20	ED I/Q DIFF.OUTPUT BOARD I/Q DIFF.OUTPUT BOARD HIERZU STROML.1110.3768 S SEE CIRC.DIAGR.1110.3768 S	1110.3768.02			
W25	DY OPTION POWER CABLE OPTION POWER CABLE	1110.3780.00			
W111	DV I/Q DIFF. CABLE I/Q DIFF. CABLE	1110.3797.00			
W112	DV I/Q DIFF. CABLE I/Q DIFF. CABLE	1110.3797.00			

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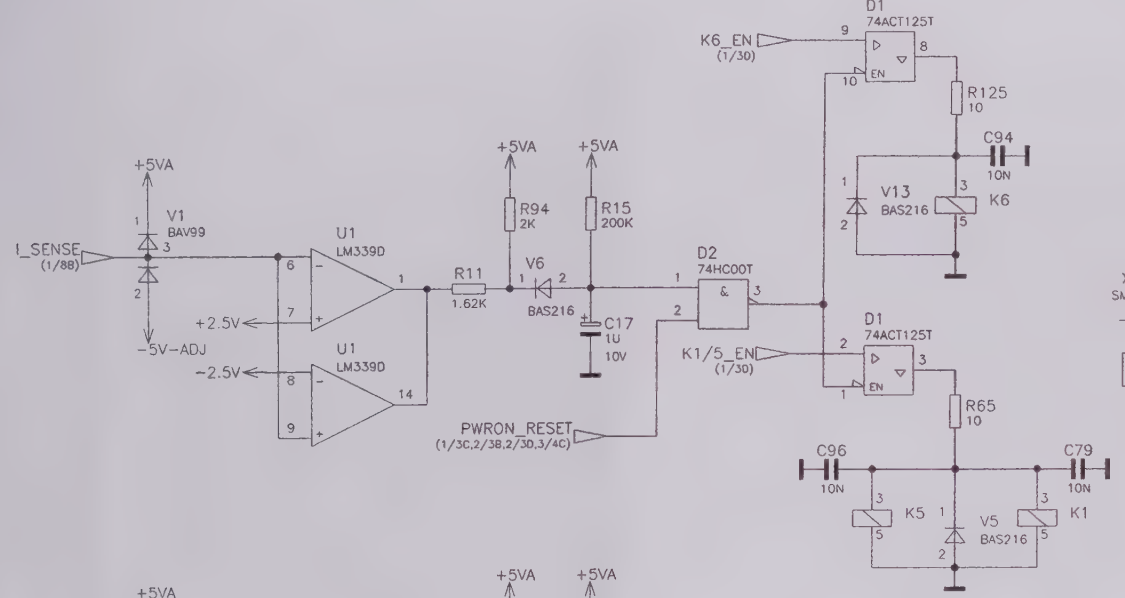

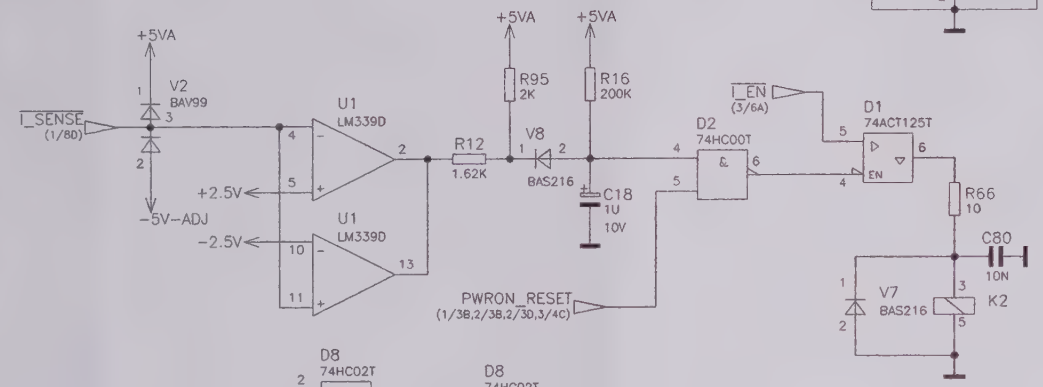

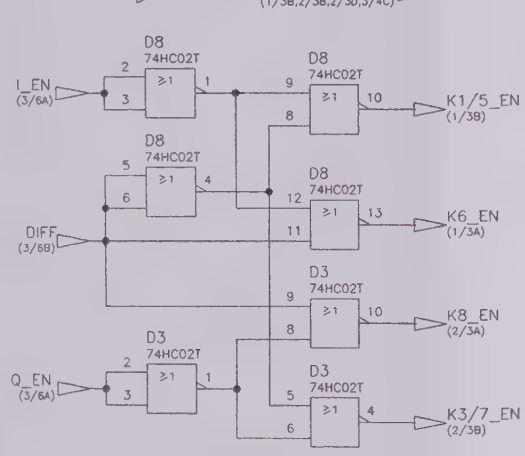

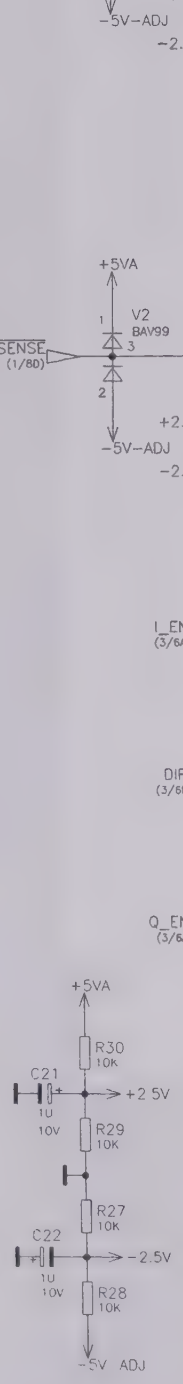

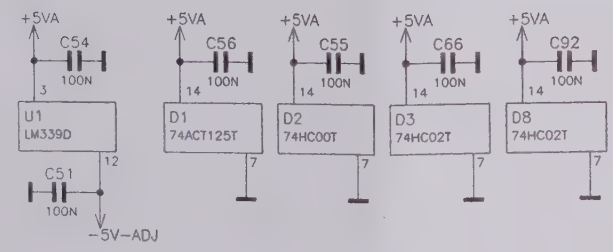

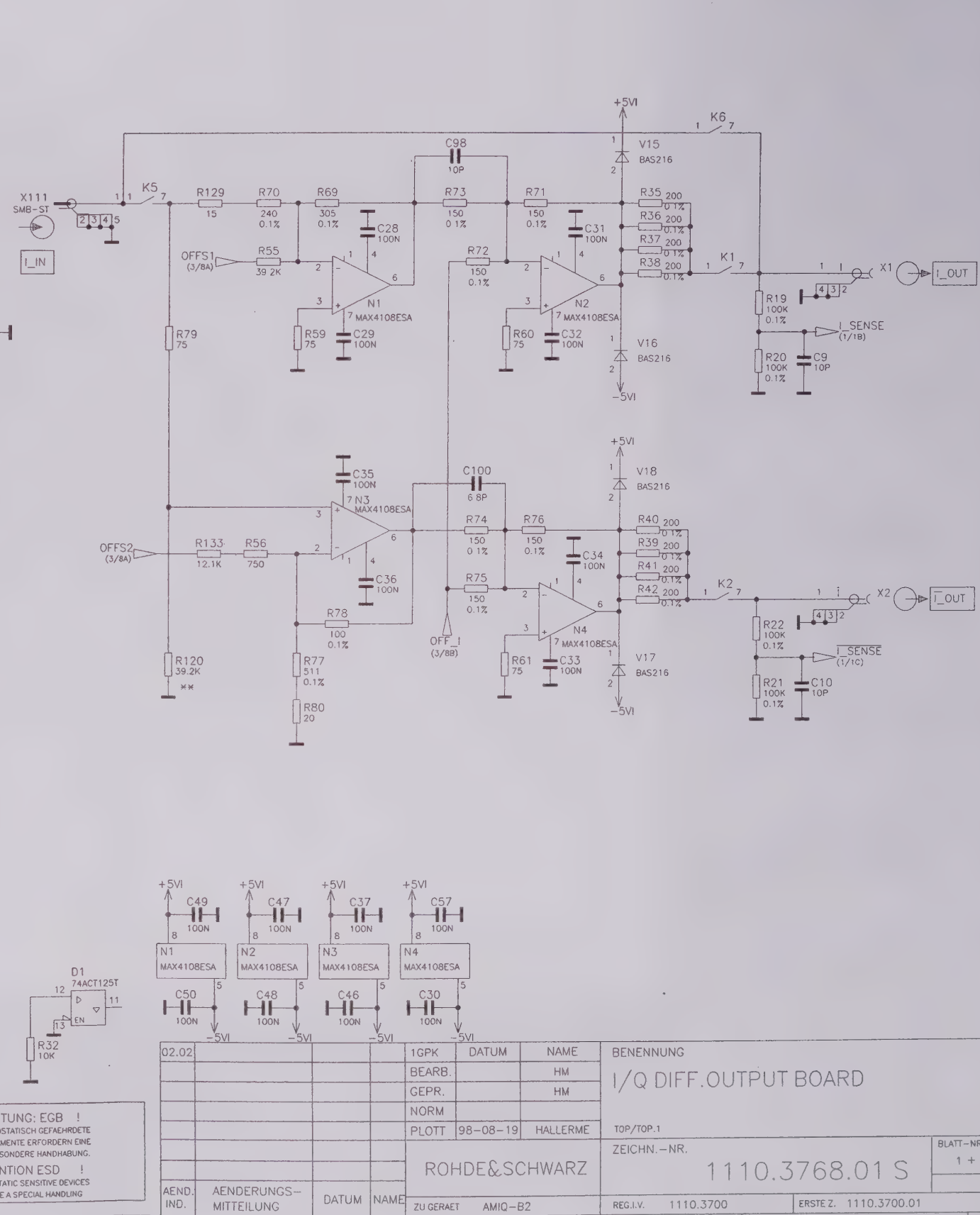

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

02.02				1GPK	DATUM	NAME	BENENNUNG
				BEARB.		HM	I/Q DIFF.OUTPUT BOARD
				GEPR.		HM	
				NORM			TOP/TOP.1
				PLOTT	98-08-19	HALLERME	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.3768.01 S
				ZU GERAET AMIQ-B2			BLATT-NR. 1 +
							REG.I.V. 1110.3700 ERSTE Z. 1110.3700.01

BEHALTEN WIR UNS AL[illegible]ECHTE VOR

Q_SENSE (2/8B)
+5VA
V3 BAV99
+2.5V
-5V-ADJ
-2.5V
U2 LM339D
R13 1.62K
R96 2K
R17 200K
V10 BAS216
C19 1U 10V
D2 74HC00T
PWRON_RESET (1/3B,1/3C,2/3D,3/4C)
D7 74ACT125T
K8_EN (1/3E)
R126 10
C95 10N
V14 BAS216
K8
K3/7_EN (1/3E)
R67 10
C97 1N
C81 10N
K7
V9 BAS216
K3

Q_SENSE (2/8B)
+5VA
V4 BAV99
+2.5V
-5V-ADJ
-2.5V
U2 LM339D
R14 1.62K
R97 2K
R18 200K
V11 BAS216
C20 1U 10V
D2 74HC00T
PWRON_RESET (1/3B,1/3C,2/3D,3/4C)
Q_EN (3/6A)
D7 74ACT125T
R68 10
C82 10N
V12 BAS216
K4

X112 SMB-ST
Q_IN
K7
R130 15
R92 240 0.1%
R91 305 0.1%
C44 100N
OFFS3 (3/8B)
R58 39.2K
N5 MAX4108ESA
R64 75
C43 100N
R87 75
C99 10P
R90 150 0.1%
R89 150 0.1%
C45 100N
R88 150 0.1%
N6 MAX4108ESA
R63 75
C42 100N
+5VQ
K8
V21 BAS216
R44 200 0.1%
R43 200 0.1%
R45 200 0.1%
R46 200 0.1%
K3
V22 BAS216
-5VQ
R24 100K 0.1%
R23 100K 0.1%
C11 10P
Q
X3
Q_OUT
Q_SENSE (2/7B)

OFFS4 (3/8B)
R134 12.1K
R57 750
N7 MAX4108ESA
C41 100N
C38 100N
R84 100 0.1%
R85 511 0.1%
R86 20
R121 39.2K **
C101 6.8P
R82 150 0.1%
R81 150 0.1%
R83 150 0.1%
OFF_Q (3/8D)
N8 MAX4108ESA
R62 75
C39 100N
C40 100N
+5VQ
V19 BAS216
R48 200 0.1%
R47 200 0.1%
R49 200 0.1%
R50 200 0.1%
K4
V20 BAS216
-5VQ
R26 100K 0.1%
R25 100K 0.1%
C12 10P
$\overline{Q}$
X4
$\overline{Q}$_OUT
$\overline{Q}$_SENSE (2/7C)

+5VQ
C27 100N
C25 100N
C23 100N
C58 100N
N5 MAX4108ESA
N6 MAX4108ESA
N7 MAX4108ESA
N8 MAX4108ESA
C26 100N
C24 100N
C60 100N
C59 100N
-5VQ

+5VA
C53 100N
U2 LM339D
C52 100N
-5V-ADJ
C93 100N
D7 74ACT125T
R54 10K

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
02.02			

	DATUM	NAME
1GPK		
BEARB.		HM
GEPR.		HM
NORM		
PLOTT	98-08-19	HALLERME

BENENNUNG
I/Q DIFF.OUTPUT BOARD
TOP/TOP.2

ROHDE&SCHWARZ
ZEICHN.-NR. 1110.3768.01 S
BLATT-NR. 2 +
ZU GERAET AMIQ-B2
REG.I.V. 1110.3700
ERSTE Z. 1110.3700.01

FÜR DIESE UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR

N14 LM78L05ACM
R127 39 1W
C83 4.7U 25V
C84 4.7U 25V
+5V-ADJ

N30 LT1117CS
+12VA
R107 5.6 1W
R124 5.6 1W
C5 10U 25V
R33 301
R9 100
C14 47U 10V
V27 SM6T6V8A
+5VI

N31 LT1117CS
R122 5.6 1W
R123 5.6 1W
C6 10U 25V
R34 301
R10 100
C15 47U 10V
V29 SM6T6V8A
+5VQ

N13 LM79L05ACD
R128 39 1W
C85 4.7U 25V
C86 4.7U 25V
-5V-ADJ

N15 LT1175CS8
-12VA
R100 5.6 1W
R101 5.6 1W
R116 0
R117 0
C87 10U 25V
R104 150K
R98 47K
C89 47U 10V
V28 SM6T6V8A
-5VI

N16 LT1175CS8
R102 5.6 1W
R103 5.6 1W
R119 0
R118 0
C88 10U 25V
R105 150K
R99 47K
C90 47U 10V
V30 SM6T6V8A
-5VQ

+5VA
C65 100N
C16 100U 35V
L2 625R(Z)

X25 SER1_CLK R51 100 C74 1P
X25 STROBE1 R52 100 C76 1P
X25 DATA1_OUT R53 100 C91 1P
X25 PWRON_RESET (1/3B,1/3C,2/3B,2/3D) D3 74HC02T
X25 OPT_ID0 R6 100
X25 OPT_ID1 R7 100 N.F. +5VA
X25 L3 625R(Z) -12VA
X25 L1 625R(Z) +12VA

R93 1K C3 10U 25V
N12 OP97
C13 10P
R5 100
R8 100
C8 10U 25V
C70 100N
C7 10U 25V C71 100N
C4 10U 25V C72 100N

+5VA
R106 10K
D4 74HCT4094T
C2 EN3
SRG C1/→
1D 2D
I_EN (1/2D)
I_EN (1/3C)
Q_EN (1/2E)
Q_EN (2/3C)
DIFF (1/2D)

+5V-ADJ
D5 DAC8143
VREF RFB \CLR \LD1 \LD2 STB1 IOUT1 STB2 \STB3 IOUT2 STB4 SRI SRO
C1 12P
N10 OP297GS
+5V-ADJ
D6 DAC8143
C2 12P
N11 OP297GS

N9 OP297GS
R31 5.11K 0.1%
R113 20K 0.1%
R112 20K 0.1%
N9 OP297GS
R4 5K 2
R3 5K 2
R2 5K 2
R1 5K 2
OFFS1 (1/5B)
OFFS2 (1/5C)
OFFS3 (2/5B)
OFFS4 (2/5C)

+5VI
R109 20K 0.1%
R108 20K 0.1%
V25 BC850B
P10 +-2,5V
C102 100N
R114 10K 0.1%
N10 OP297GS
R131 1K
OFF_I (1/6C)
V23 BC860B
-5VI

+5VQ
R110 20K 0.1%
R111 20K 0.1%
V26 BC850B
P11 +-2,5V
C103 100N
R115 10K 0.1%
N11 OP297GS
R132 1K
OFF_Q (2/6C)
V24 BC860B
-5VQ

+5V-ADJ C68 100N N12 OP97 C69 100N -5V-ADJ
+5V-ADJ C73 100N D5 DAC8143
+5V-ADJ C75 100N D6 DAC8143
+5V-ADJ C64 100N N9 OP297GS C63 100N -5V-ADJ
+5V-ADJ C77 100N N10 OP297GS C78 100N -5V-ADJ
+5V-ADJ C62 100N N11 OP297GS C61 100N -5V-ADJ

+5VA C67 100N D4 74HCT4094T

ACHTUNG: EGB !
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD !
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
02.02			

	DATUM	NAME
1GPK		
BEARB.		HM
GEPR.		HM
NORM		
PLOTT	98-08-19	HALLERME

BENENNUNG
I/Q DIFF.OUTPUT BOARD
TOP/TOP.3

ROHDE&SCHWARZ
ZU GERAET AMIQ-B2
ZEICHN.-NR. 1110.3768.01 S
BLATT-NR. 3 -
REG.I.V. 1110.3700
ERSTE Z. 1110.3700.01

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS				
C1	CC 12PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8256.00	MURATA	GRM39COG***F50ZPT	
C2	CC 12PF+-1% 50VNPO 0603 SMD-CERAMIC-CAPACITOR	0009.8256.00	MURATA	GRM39COG***F50ZPT	
C3 ..8	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
C9 ..13	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C14	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C15	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C16	CE 100UF+-20%35V RM5 ELECTROLYTIC CAPACITOR	0008.7510.00	PHILIPS_CO	2222 116 90042	
C17 ..22	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	SPRAGUE	293D 105 X9 010 D2T	
C23 ..73	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C74	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C75	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C76	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C77	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C78	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C79 ..82	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C83 ..86	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	SPRAGUE	293D475X9035D2W	
C87	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
C88	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE	293D 106 X9 025 D2W	
C89	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C90	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE	293D X9 010 D2W	
C91	CC 1,0PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8304.00	MURATA	GRM39COG***B50ZPT	
C92	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C93	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C94 ..96	CC 10NF+-10% 50VHDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4844.00	MURATA	GRM39X7R***K5C500PT*	
C97	CC 1,0NF+-10%50V HDK 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4938.00	MURATA	GRM39X7R***K5C500PT*	
C98	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C99	CC 10PF+-0,1 50V NPO 0603 SMD-CERAMIC-CAPACITOR	CC 0009.4567.00	MURATA	GRM39COG***B50ZPT	
C100	CC 6,8PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8262.00	MURATA	GRM39COG***B50ZPT	
C101	CC 6,8PF0,1PF50V NPO 0603 SMD-CERAMIC-CAPACITOR	0009.8262.00	MURATA	GRM39COG***B50ZPT	
C102	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
C103	CC 100NF+-10%16V HDK 0603 CERAMIC CHIP CAPACITOR	1097.6292.00	PHILIPS_CO	2238 786 16649	
D1	BL 74ACT125SC 4XBUFFER 3S IC QUAD BUFFER 3-STATE	BL 2013.8620.00	NSC	74ACT125SC	
D2	BL PC74HC00T 4X2IN.NAND QUAD 2INPUT NAND GATE	BL 0007.3463.00	PHILIPS_SE	(PC)74HC00D(T)	
D3	BL PC74HC02T 4X2IN.NORG QUAD 2INPUT NOR GATE	BL 0007.3470.00	PHILIPS_SE	(PC)74HC02(D/T)	
D4	BL PC74HCT4094T 8ST.SHREG SHIFT REGISTER	BL 0007.6885.00	PHILIPS	(PC)74HCT4094(D)	
D5	BJ DAC8143 1X12B-DAC 12B SERIAL D/A-CONVERTER	1012.9510.00	PMI	DAC8143FS	
D6	BJ DAC8143 1X12B-DAC 12B SERIAL D/A-CONVERTER	1012.9510.00	PMI	DAC8143FS	

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D7	BL 74ACT125SC 4XBUFFER 3S IC QUAD BUFFER 3-STATE	BL 2013.8620.00	NSC	74ACT125SC	
D8	BL PC74HC02T 4X2IN.NORG QUAD 2INPUT NOR GATE	BL 0007.3470.00	PHILIPS_SE	(PC)74HC02(D/T)	
K1	SR 5V 500 OHM 1X1 SIL	1012.9604.00	HAMLIN	HE3621A0500	
..8	RELAY 5V SIL				
L1	LD SMD-DR.Z=625 OHM 50MHZ	1078.3240.00	PHILIPS_CO	4330 030 41663	
..3	CHOKE				
N1	BO MAX4108ESA OPAMP	1110.3139.00	MAXIM	MAX4108ESA	
..8	OPAMP				
N9	BO OP297GS 2X PREC OPAMP	6071.9467.00	ANALOG_DEV	OP297GS	
..11	IC DUALOPAMP				
N12	BO OP97FS LP PREC OPAMP	1036.4390.00	PMI	OP97F(S)	
	OPAMP				
N13	BO 79L05ACM-5V5%OA1VREGL	0851.6703.00	NSC	LM79L05ACM(X)	
	VOLTAGE REGULATOR 5VDC				
N14	BO M78L05ACM+5V5%OA1 VREG	0351.3451.00	NSC	LM78L05ACM	
	VOLTAGE REGULATOR				
N15	BO LT1175CS8 LOWD.-VREGL	1110.3022.00	LINEAR_TEC	LT1175CS8	
	IC VOLTAGE REGULATOR				
N16	BO LT1175CS8 LOWD.-VREGL	1110.3022.00	LINEAR_TEC	LT1175CS8	
	IC VOLTAGE REGULATOR				
N30	BO LT1117CSTLOWDROP+VREGL	1036.4283.00	LINEAR_TEC	LT1117(CST)	
	VOLTAGE REGULATOR				
N31	BO LT1117CSTLOWDROP+VREGL	1036.4283.00	LINEAR_TEC	LT1117(CST)	
	VOLTAGE REGULATOR				
P10	VL EINPRESSSTIFT 5,6	VL 0010.7250.00	AMP	1-928776-5	
	PIN				
P11	VL EINPRESSSTIFT 5,6	VL 0010.7250.00	AMP	1-928776-5	
	PIN				
R1	RS 0,3W 5KOHM+-10%CERMET	RS 0006.6698.00	BI_TECHNOL	67 W	
..4	TRIMMING POTENTIOMETER				
R5	RG 100R +-1% TK200 0603	RG 0009.5334.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R6	RG 100R +-1% TK200 0603	RG 0009.5334.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R7	RG 100R +-1% TK200 0603	RG 0009.5334.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R8	RG 100R +-1% TK200 0603	RG 0009.5334.00	DRALORIC	CR 0603	
..10	SMD-RESISTOR EIA0603				
R11	RG 1,62KOHM+-1%TK100 1206	RG 0006.9997.00	PHILIPS_CO	RC02	
..14	CHIP RESISTOR				
R15	RG 200K +-1% TK200 0603	1093.6200.00	DRALORIC	CR 0603	
..18	SMD RESISTOR				
R19	RG 100,0KO+-0,1%TK25 1206	0010.0655.00	PHILIPS_CO	MPC 01	
..26	SMD-RESISTOR EIA1206				
R27	RG 10K +-1% TK200 0603	RG 0009.5357.00	DRALORIC	CR 0603	
..30	SMD-RESISTOR EIA0603				
R31	RG 5,11KOH+-0,1%TK25 1206	0009.8185.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R32	RG 10K +-1% TK200 0603	RG 0009.5357.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R33	RG 301 OHM+-1%TK200 0603	0009.9123.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R34	RG 301 OHM+-1%TK200 0603	0009.9123.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R35	RG 200 OHM+-0,1%TK25 1206	1110.3074.00	PHILIPS_CO	MPC 01	
..50	CHIP RESISTOR				
R51	RG 100R +-1% TK200 0603	RG 0009.5334.00	DRALORIC	CR 0603	
..53	SMD-RESISTOR EIA0603				
R54	RG 10K +-1% TK200 0603	RG 0009.5357.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R55	RG 39K2 +-1% TK200 0603	0010.9823.00	DRALORIC	CR 0603	
	SMD-REGISTER				
R56	RG 750R +-1% TK200 0603	1097.6492.00	DRALORIC	CR 0603	
	SMD RESISTOR				
R57	RG 750R +-1% TK200 0603	1097.6492.00	DRALORIC	CR 0603	
	SMD RESISTOR				
R58	RG 39K2 +-1% TK200 0603	0010.9823.00	DRALORIC	CR 0603	
	SMD-REGISTER				
R59	RG 75,0 OHM+-1%TK200 0603	0048.4906.00	DRALORIC	CR 0603	
..64	SMD RESISTOR				

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R65	RG 10R +-1% TK200 0603	RG 0009.5328.00	DRALORIC	CR 0603	
..68	SMD-RESISTOR EIA0603				
R69	RG 305 OHM+-0,1%TK25 1206	0009.8104.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R70	RG 240 OHM+-0,1%TK25 1206	2035.3780.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R71	RG 150 OHM+-0,1%TK25 1206	0009.8091.00	PHILIPS_CO	MPC 01	
..76	SMD-RESISTOR EIA1206				
R77	RG 511 OHM+-0,1%TK25 1206	0009.8810.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R78	RG 100 OHM+-0,1%TK25 1206	0009.8033.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR				
R79	RG 75,0 OHM+-1%TK200 0603	0048.4906.00	DRALORIC	CR 0603	
	SMD RESISTOR				
R80	RG 20R +-1% TK200 0603	0048.5525.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R81	RG 150 OHM+-0,1%TK25 1206	0009.8091.00	PHILIPS_CO	MPC 01	
..83	SMD-RESISTOR EIA1206				
R84	RG 100 OHM+-0,1%TK25 1206	0009.8033.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR				
R85	RG 511 OHM+-0,1%TK25 1206	0009.8810.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R86	RG 20R +-1% TK200 0603	0048.5525.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R87	RG 75,0 OHM+-1%TK200 0603	0048.4906.00	DRALORIC	CR 0603	
	SMD RESISTOR				
R88	RG 150 OHM+-0,1%TK25 1206	0009.8091.00	PHILIPS_CO	MPC 01	
..90	SMD-RESISTOR EIA1206				
R91	RG 305 OHM+-0,1%TK25 1206	0009.8104.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R92	RG 240 OHM+-0,1%TK25 1206	2035.3780.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR EIA1206				
R93	RG 1KO +-1% TK200 0603	RG 0009.5340.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R94	RG 2KO +-1% TK200 0603	1097.6328.00	DRALORIC	CR 0603	
..97	SMD RESISTOR				
R98	RG 47K +-1% TK200 0603	0009.7072.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R99	RG 47K +-1% TK200 0603	0009.7072.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R100	RG 5R6 1% 1W 1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
..103	SMD RESISTOR				
R104	RG 150K +-1% TK200 0603	0009.7095.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R105	RG 150K +-1% TK200 0603	0009.7095.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R106	RG 10K +-1% TK200 0603	RG 0009.5357.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R107	RG 5R6 1% 1W 1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
	SMD RESISTOR				
R108	RG 20,0KOH+-0,1%TK25 1206	0009.7643.00	PHILIPS_CO	MPC 01	
..113	SMD-RESISTOR				
R114	RG 10,0KOH+-0,1%TK25 1206	0009.7666.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR				
R115	RG 10,0KOH+-0,1%TK25 1206	0009.7666.00	PHILIPS_CO	MPC 01	
	SMD-RESISTOR				
R116	RG 0-OHM WIDERSTAND 0603	0009.9369.00	PHILIPS_CO	RC21 0 OHM	
..119	0-OHM RESISTOR EIA0603				
R122	RG 5R6 1% 1W 1218	0048.5077.00	PHILIPS_CO	PRC201-5R6 1% TK200	
..124	SMD RESISTOR				
R125	RG 10R +-1% TK200 0603	RG 0009.5328.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R126	RG 10R +-1% TK200 0603	RG 0009.5328.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R127	RG 39R 1% 1W 1218	1104.2786.00	PHILIPS_CO	PRC201-39R 1% TK100	
	SMD-RESISTOR				
R128	RG 39R 1% 1W 1218	1104.2786.00	PHILIPS_CO	PRC201-39R 1% TK100	
	SMD-RESISTOR				
R129	RG 15R +-1% TK200 0603	0009.6899.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R130	RG 15R +-1% TK200 0603	0009.6899.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R131	RG 1KO +-1% TK200 0603	RG 0009.5340.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R132	RG 1KO +-1% TK200 0603	RG 0009.5340.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				
R133	RG 12K1 +-1% TK200 0603	0010.8462.00	DRALORIC	CR 0603	
	SMD-RESISTOR EIA0603				

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Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R134	RG 12K1 +-1% TK200 0603 SMD-RESISTOR EIA0603	0010.8462.00	DRALORIC	CR 0603	
U1	BO LM339D 4X COMPAR COMPARATOR	BO 0007.3757.00	SIGNETICS	LM-339D	
U2	BO LM339D 4X COMPAR COMPARATOR	BO 0007.3757.00	SIGNETICS	LM-339D	
V1 ..4	AD BAV99 75V DUO UDI HIGH-SPEED DOUBLE DIODE	AD 0911.0092.00	VALVO	BAV99	
V5 ..22	AD BAS216 75V UDI HIGHSPEED SWITCHING DIODE	0010.9346.00	PHILIPS_SE	BAS216	
V23	AK BC860B P 45V 200MA TRANSISTOR	AK 0007.7975.00	MOTOROLA	BC860B	
V24	AK BC860B P 45V 200MA TRANSISTOR	AK 0007.7975.00	MOTOROLA	BC860B	
V25	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	VALVO	BC850B	
V26	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	VALVO	BC850B	
V27 ..30	AE SM6T6V8A 6,8V SUPPR SUPPRESSOR DIODE	0009.8733.00	SGS-THOMSO	SM6T6V8A	
X1 ..4	FJ WINKELEINBAUBUCHSE BNC ANGLE BNC	FJ 1051.4380.00	AMP	227677-1 +2X1-329631	
X25	FP STECKERLEISTE 20P.GER CONNECTOR 20P	FP 0351.3468.00	SIEMENS	V23535-A2200-A202	
X111	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	
X112	FJ EINBAUSTECKER F.GS SMB PLUG	FJ 0063.5168.00	ROSENBERGE	59S106-400-D3	

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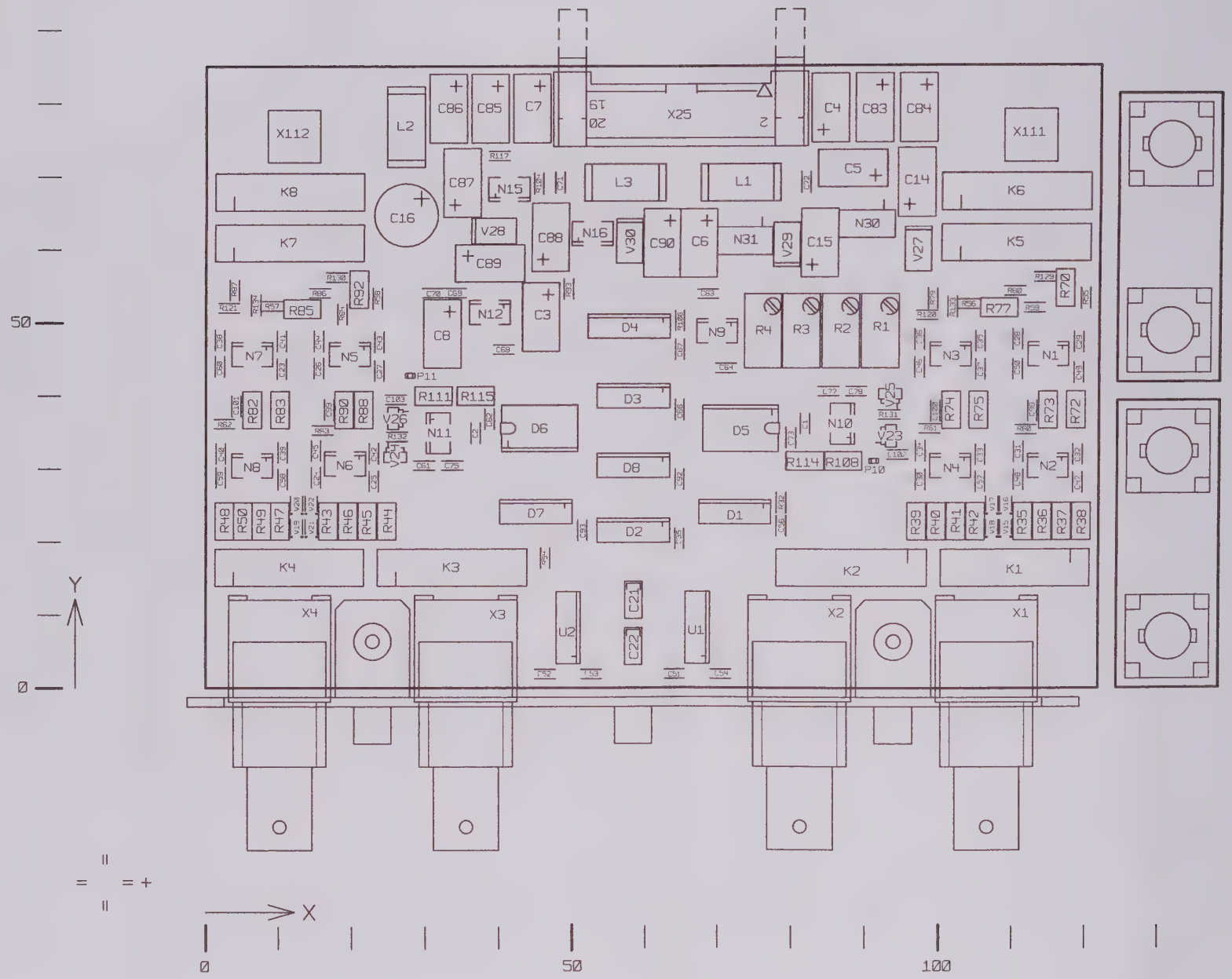


DARSTELLUNG SEITE B
VIEW ON SIDE B

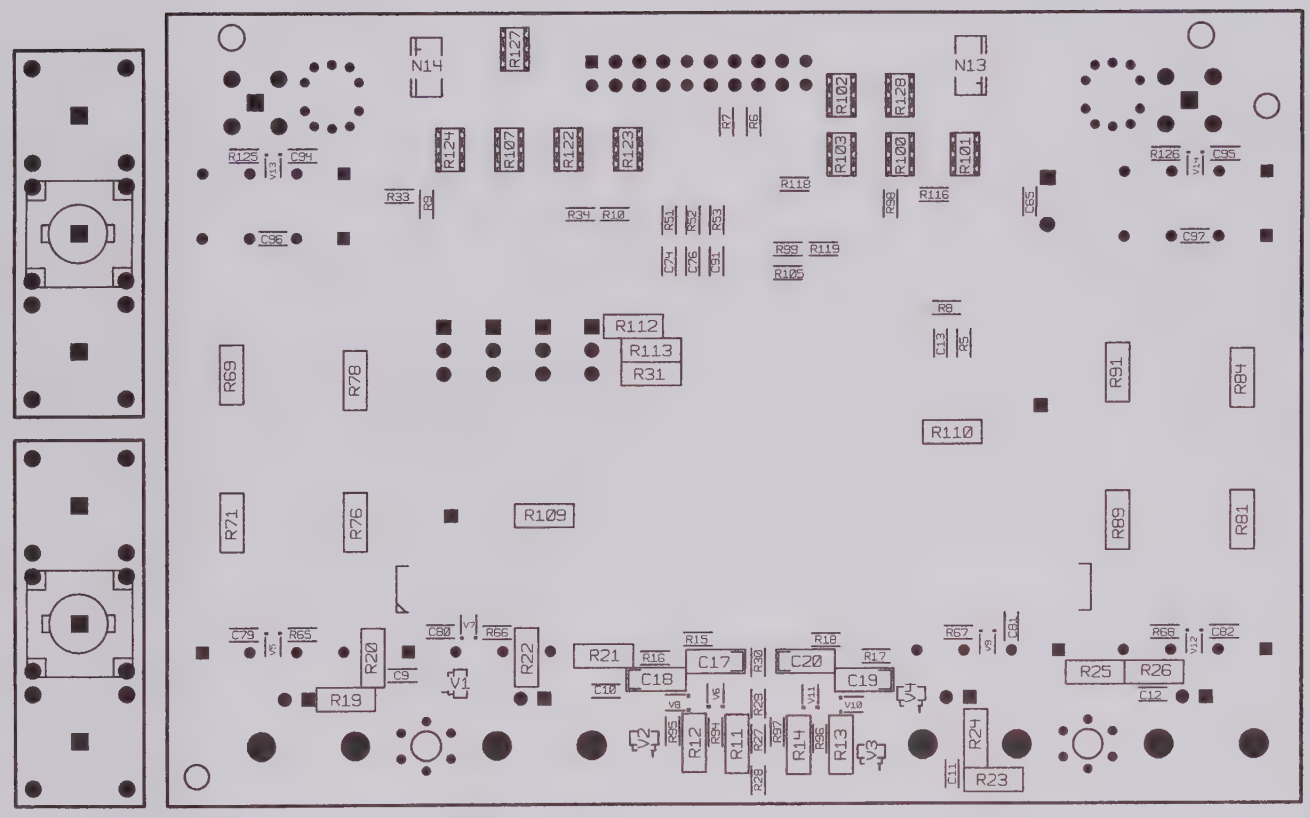
ACHTUNG: EGB!
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD!
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

BINDENDE ANGABEN UEBER VARIANTEN, TRIMMWERTE, BAUTEILWERTE UND NICHT BESTUECKTE BAUTEILE SIEHE SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST.

02.00				1GPK	DATUM	NAME	BENENNUNG: I/Q DIFF.OUTPUT BOARD
				BEARB.		HM	
				GEPR.		HM	
				NORM			
				PLOTT	98-07-13	HALLERME	
AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME	ROHDE&SCHWARZ			ZEICHN.-NR. 1110.3768.01 D; BLATT NR. 1+; V.; BL.
				ZU GERAET AMIQ-B2			REG.I.V. 1110.3700; ERSTE Z. 1110.3700

DIESE UNTERLAGE BEHALTEN WIR UNS ALLE RECHTE VOR



DARSTELLUNG SEITE A
VIEW ON SIDE A

ACHTUNG: EGB!
ELEKTROSTATISCH GEFAEHRDETE BAUELEMENTE ERFORDERN EINE BESONDERE HANDHABUNG.
ATTENTION ESD!
ELECTROSTATIC SENSITIVE DEVICES REQUIRE A SPECIAL HANDLING

BINDENDE ANGABEN UEBER VARIANTEN, TRIMMWERTE, BAUTEILWERTE UND NICHT BESTUECKTE BAUTEILE SIEHE SA.

FOR BINDING INFORMATION ON MODELS, TRIMMING AND COMPONENTS VALUES AND NONFITTED COMPONENTS SEE PARTS LIST.

AEND. IND.	AENDERUNGS-MITTEILUNG	DATUM	NAME
02.00			

	DATUM	NAME
1GPK		
BEARB.		HM
GEPR.		HM
NORM.		
PLOTT	98-07-13	HALLERME

ROHDE&SCHWARZ
ZU GERAET AMIQ-B2

BENENNUNG
I/Q DIFF.OUTPUT BOARD

ZEICHN.-NR.
1110.3768.01 D

BLATT NR. 2-
IV. BI.

REG.I.V. 1110.3700
LETZTE Z. 1110.3700

BEHALTEN WIR UNS ALLE RECHTE VOR

ROHDE&SCHWARZ

XY-Liste

XY List

Erklärung der Spaltenbezeichnungen:

el. Kennz.	Bauelement-Kennzeichen
Seite	Leiterplatten-Seite, auf der sich das Bauelement befindet
X/Y	Koordinaten (in Millimeter) des Bauelementes auf der Leiterplatte bezogen auf den Nullpunkt
Planq., Bl.	Planquadrat und Seite des Schaltbildes für das jeweilige Bauelement

Explanation of column designations:

Part	Identification of instrument part
Side	Side of the PC board on which instrument part is positioned
X/Y	Coordinates (in units of millimeters) of the component on the PC board in reference to zero point
Sqr, Pg	Square and page of the diagram for the respective instrument part

Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C1	B	82	35	6B	3
C2	B	37	36	6D	3
C3	B	46	54	5C	3
C4	B	85	76	4D	3
C5	B	92	71	2A	3
C6	B	67	64	2B	3
C7	B	44	83	4D	3
C8	B	32	52	5D	3
C9	A	97	14	8B	1
C10	A	76	12	8D	1
C11	A	37	2	8B	2
C12	A	17	12	8D	2
C13	A	39	50	5C	3
C14	B	97	66	3B	3
C15	B	84	58	3B	3
C16	B	27	67	4B	3
C17	A	61	15	3B	1
C18	A	71	13	3C	1
C19	A	45	13	3B	2
C20	A	55	15	3C	2
C21	B	58	13	1E	1
C22	B	58	7	1F	1
C23	B	10	43	6E	2
C24	B	15	30	5E	2
C25	B	23	28	5E	2
C26	B	15	43	5E	2
C27	B	24	43	5E	2
C28	B	111	48	6B	1
C29	B	119	47	6B	1
C30	B	98	28	6E	1
C31	B	111	33	7B	1
C32	B	119	31	7B	1
C33	B	106	31	7D	1
C34	B	98	33	7C	1
C35	B	106	48	6C	1
C36	B	97	47	6C	1
C37	B	106	43	6E	1
C38	B	2	47	6C	2
C39	B	11	32	6D	2
C40	B	2	33	7C	2
C41	B	10	48	6C	2
C42	B	23	31	6B	2
C43	B	24	47	6B	2
C44	B	15	48	6B	2
C45	B	15	33	7B	2
C46	B	97	43	6E	1
C47	B	119	27	5E	1
C48	B	111	28	5E	1
C49	B	119	42	5E	1
C50	B	111	43	5E	1
C51	B	65	2	2F	1
C52	B	47	2	2F	2
C53	B	53	2	2E	2
C54	B	71	2	2E	1
C55	B	65	20	3E	1
C56	B	79	23	2E	1
C57	B	106	28	6E	1
C58	B	11	28	6E	2
C59	B	2	28	6E	2
C60	B	2	43	6E	2
C61	B	29	30	8E	3
C62	B	39	38	8E	3
C63	B	69	54	7E	3
C64	B	72	44	7E	3
C65	A	29	64	4B	3
C66	B	65	39	3E	1
C67	B	65	46	2F	3
C68	B	40	46	5E	3
C69	B	33	54	5E	3
C70	B	32	54	5D	3
C71	B	48	70	4D	3
C72	B	82	69	4D	3
C73	B	80	34	6E	3
C74	A	68	59	5B	3

el. Kennz *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
C75	B	33	30	7E	3
C76	A	65	59	5C	3
C77	B	86	41	8E	3
C78	B	90	41	8E	3
C79	A	113	18	4B	1
C80	A	92	19	4C	1
C81	A	31	18	4B	2
C82	A	9	18	4C	2
C83	B	91	83	2A	3
C84	B	97	83	3A	3
C85	B	39	83	2C	3
C86	B	33	83	3C	3
C87	B	35	66	2D	3
C88	B	47	58	2E	3
C89	B	35	58	3D	3
C90	B	62	64	3E	3
C91	A	63	59	5C	3
C92	B	65	29	3E	1
C93	B	51	22	3E	2
C94	A	108	70	4A	1
C95	A	9	70	4A	2
C96	A	111	61	3B	1
C97	A	12	61	3B	2
C98	B	113	39	6A	1
C99	B	17	39	6A	2
C100	B	100	39	6C	1
C101	B	4	39	6C	2
C102	B	94	32	8B	3
C103	B	27	39	8C	3
D1	B	76	27	2F	1
D1	B	76	27	3A	1
D1	B	76	27	3B	1
D1	B	76	27	3C	1
D1	B	76	27	4E	1
D2	B	62	24	2F	1
D2	B	62	24	3B	1
D2	B	62	24	3C	1
D2	B	62	24	3B	2
D2	B	62	24	3C	2
D3	B	62	43	2D	1
D3	B	62	43	2E	1
D3	B	62	43	2E	1
D3	B	62	43	3F	1
D3	B	62	43	5B	3
D4	B	62	52	2F	3
D4	B	62	52	5A	3
D5	B	77	40	6B	3
D5	B	77	40	6E	3
D6	B	41	31	6D	3
D6	B	41	31	7E	3
D7	B	49	27	3A	2
D7	B	49	27	3B	2
D7	B	49	27	3C	2
D7	B	49	27	3E	2
D7	B	49	27	3F	2
D8	B	62	33	2D	1
D8	B	62	33	2D	1
D8	B	62	33	2D	1
D8	B	62	33	2D	1
D8	B	62	33	3F	1
K1	B	118	17	4B	1
K1	B	118	17	7B	1
K2	B	96	17	4C	1
K2	B	96	17	7C	1
K3	B	26	17	4B	2
K3	B	26	17	7B	2
K4	B	4	17	4D	2
K4	B	4	17	7C	2
K5	B	103	61	3B	1
K5	B	103	61	5B	1
K6	B	103	68	4A	1
K6	B	103	68	7A	1
K7	B	4	61	3B	2
K7	B	4	61	5B	2

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
K8	B	4	68	4B	2
K8	B	4	68	7A	2
L1	B	69	69	4D	3
L2	B	27	73	4B	3
L3	B	61	69	4D	3
N1	B	117	48	5E	1
N1	B	117	48	6B	1
N2	B	117	33	5E	1
N2	B	117	33	6B	1
N3	B	104	48	6C	1
N3	B	104	48	6E	1
N4	B	104	33	6C	1
N4	B	104	33	6E	1
N5	B	22	48	5B	2
N5	B	22	48	5E	2
N6	B	21	33	5E	2
N6	B	21	33	6B	2
N7	B	8	48	5C	2
N7	B	8	48	6E	2
N8	B	8	33	6C	2
N8	B	8	33	6E	2
N9	B	72	51	7A	3
N9	B	72	51	7B	3
N9	B	72	51	7E	3
N10	B	90	34	6C	3
N10	B	90	34	7B	3
N10	B	90	34	8E	3
N11	B	29	37	6D	3
N11	B	29	37	7D	3
N11	B	29	37	8E	3
N12	B	41	54	5C	3
N12	B	41	54	5E	3
N13	A	32	77	2C	3
N14	A	97	81	2A	3
N15	B	39	66	2D	3
N16	B	51	60	2D	3
N30	B	92	67	2A	3
N31	B	76	64	2B	3
P10	B	91	31	8B	3
P11	B	28	43	8C	3
R1	B	92	51	8A	3
R2	B	87	51	8A	3
R3	B	81	51	7A	3
R4	B	76	51	7A	3
R5	A	36	49	5C	3
R6	A	59	74	4C	3
R7	A	62	74	4C	3
R8	A	39	53	5D	3
R9	A	94	66	2B	3
R10	A	75	64	2B	3
R11	A	61	5	2B	1
R12	A	65	5	2C	1
R13	A	50	5	2B	2
R14	A	54	5	2C	2
R15	A	66	18	3A	1
R16	A	69	16	3C	1
R17	A	47	16	3B	2
R18	A	50	18	3C	2
R19	A	104	11	7B	1
R20	A	100	14	7B	1
R21	A	77	16	7D	1
R22	A	83	14	7C	1
R23	A	35	3	7B	2
R24	A	35	9	7B	2
R25	A	20	14	7D	2
R26	A	14	14	7C	2
R27	A	58	8	1E	1
R28	A	58	3	1F	1
R29	A	58	12	1E	1
R30	A	58	16	1E	1
R31	A	72	46	6A	3
R32	B	79	25	4E	1
R33	A	98	66	2B	3
R34	A	78	64	2B	3

ROHDE & SCHWARZ

Benennung: *Designation:* ED I/Q DIFF.OUTPUT BOARD

Sprache: *Lang.:* de

Blatt: *Sh.:* 1 +

Aei: *C.I.:* 02.00

Typ: *Type:* AMIQ–B2

Datum: *Date:* 98–07–14

Abteilung: *Dpt:* 1GPK

Name: *Name:* HM

Sachnr.: *Part No.:* 1110.3768.01 XY

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Nicht–Service–Relevante Bauteile / Non–Service–Relevant Components

el. Kennz. *Part*	Seite *Side*	X	Y	Planq. *Sqr*	Bl. *Pg*
R35	B	112	24	7B	1
R36	B	114	24	7B	1
R37	B	117	24	7B	1
R38	B	120	24	7B	1
R39	B	97	24	7C	1
R40	B	100	24	7C	1
R41	B	102	24	7C	1
R42	B	105	24	7C	1
R43	B	17	24	7B	2
R44	B	25	24	7B	2
R45	B	22	24	7B	2
R46	B	19	24	7B	2
R47	B	10	24	7C	2
R48	B	3	24	7C	2
R49	B	8	24	7C	2
R50	B	5	24	7C	2
R51	A	68	64	4B	3
R52	A	65	64	4B	3
R53	A	63	64	4C	3
R54	B	46	18	3F	2
R55	B	120	54	5B	1
R56	B	103	53	5C	1
R57	B	8	52	5C	2
R58	B	23	54	5B	2
R59	B	114	52	5B	1
R60	B	113	35	6B	1
R61	B	100	36	6D	1
R62	B	3	36	6D	2
R63	B	17	35	6B	2
R64	B	19	50	5B	2
R65	A	106	18	4B	1
R66	A	85	19	4C	1
R67	A	38	18	4B	2
R68	A	15	18	4C	2
R69	A	115	48	5B	1
R70	B	117	56	5B	1
R71	A	115	32	6B	1
R72	B	119	40	6B	1
R73	B	115	40	6B	1
R74	B	102	40	6C	1
R75	B	105	40	6C	1
R76	A	102	32	6C	1
R77	B	107	52	5D	1
R78	A	102	47	6C	1
R79	B	99	54	5B	1
R80	B	110	54	5D	1
R81	A	6	32	6C	2
R82	B	6	40	6C	2
R83	B	10	40	6C	2
R84	A	6	47	5C	2
R85	B	12	52	5D	2
R86	B	15	54	5D	2
R87	B	4	55	5B	2
R88	B	22	40	6B	2
R89	A	20	32	6B	2
R90	B	19	40	6B	2
R91	A	20	48	5B	2
R92	B	21	56	5B	2
R93	B	50	55	4C	3
R94	A	63	7	2A	1
R95	A	68	7	2C	1
R96	A	52	6	2B	2
R97	A	56	7	2C	2
R98	A	44	65	3D	3
R99	A	56	60	3E	3
R100	A	45	70	1D	3
R101	A	38	70	2D	3
R102	A	48	76	1D	3
R103	A	51	70	2D	3
R104	B	45	70	2D	3
R105	A	54	57	2E	3
R106	B	65	50	5A	3
R107	A	83	70	1A	3
R108	B	86	31	7B	3
R109	A	80	31	7B	3
R110	A	39	40	7C	3
R111	B	33	40	7C	3
R112	A	70	51	7A	3
R113	A	68	49	7A	3
R114	B	80	31	7B	3
R115	B	38	40	7D	3
R116	A	39	66	2D	3
R117	B	39	73	2D	3
R118	A	54	67	2E	3
R119	A	51	60	2D	3
R120	B	99	51	5D	1
R121	B	4	52	5D	2
R122	A	80	70	1B	3
R123	A	74	70	2B	3
R124	A	90	70	2A	3
R125	A	115	70	4A	1
R126	A	15	70	4A	2
R127	A	83	81	1A	3
R128	A	45	76	1C	3
R129	B	114	56	5B	1
R130	B	17	56	5B	2
R131	B	93	37	8B	3
R132	B	27	34	8D	3
R133	B	102	51	5C	1
R134	B	7	53	5C	2
U1	B	70	4	2B	1
U1	B	70	4	2B	1
U1	B	70	4	2C	1
U1	B	70	4	2C	1
U1	B	70	4	2F	1
U2	B	52	4	2B	2
U2	B	52	4	2B	2
U2	B	52	4	2C	2
U2	B	52	4	2C	2
U2	B	52	4	2F	2
V1	A	92	12	1A	1
V2	A	70	6	1C	1
V3	A	45	4	1B	2
V4	A	41	11	1C	2
V5	A	110	18	4B	1
V6	A	63	11	2B	1
V7	A	89	18	3C	1
V8	A	66	11	2C	1
V9	A	34	18	4C	2
V10	A	49	11	2B	2
V11	A	53	11	2C	2
V12	A	11	18	3D	2
V13	A	110	70	3A	1
V14	A	11	70	3B	2
V15	B	109	21	7A	1
V16	B	109	24	7B	1
V17	B	107	24	7D	1
V18	B	107	21	7C	1
V19	B	12	21	7C	2
V20	B	12	24	7D	2
V21	B	14	21	7A	2
V22	B	14	24	7B	2
V23	B	92	34	8C	3
V24	B	25	33	8D	3
V25	B	94	39	8B	3
V26	B	27	38	8C	3
V27	B	97	63	3B	3
V28	B	36	63	3D	3
V29	B	79	58	3B	3
V30	B	58	64	3D	3
X1	B	107	11	8B	1
X2	B	81	11	8C	1
X3	B	36	11	8B	2
X4	B	10	11	8C	2
X25	B	76	80	4B	3
X111	B	112	76	5B	1
X112	B	12	76	4B	2

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ROHDE & SCHWARZ

Benennung: ED I/Q DIFF.OUTPUT BOARD
Designation:

Sprache: *Lang.:* de

Blatt: *Sh.:* 2 –

Aei: *C.I.:* 02.00

Typ: *Type:* AMIQ–B2

Datum: *Date:* 98–07–14

Abteilung: *Dpt:* 1GPK

Name: *Name:* HM

Sachnr.: *Part No.:* **1110.3768.01 XY**

The name of the previously loaded configuration file is displayed in the head line of the AMIQ-K2 software. Upon program start, the **configuration** stored under setup.ak2 in the working directory is **automatically loaded.**

To start with user-specific settings

⇒ Select **File:Save Configuration** in the menu line.
⇒ Select the setup.ak2 file in the working directory in the File Select menu.
⇒ Confirm the selection.

The current configuration can also be stored when the AMIQ-K2 software is quit.

⇒ Activate the **Exit** button in the Source panel.
⇒ Select the **Save and Quit** option.
⇒ Enter the desired destination file with the extension ak2 in the File Select popup menu.
⇒ Confirm the selection.

(The names of the data files used in the last session and the number of guard samples are not specified in the setup).